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GEORGE WOOD CLAPP, D.D.S., Editor

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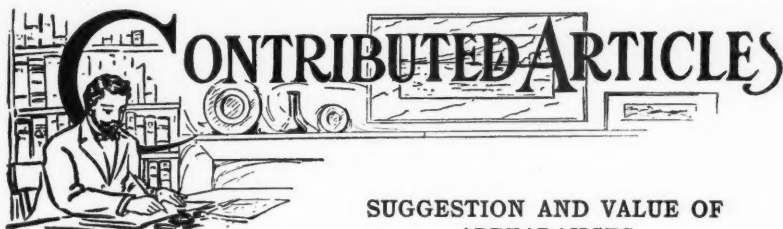
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Vol. XX

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SUGGESTION AND VALUE OF APPEARANCES

BY PERCY NORMAN WILLIAMS, D.D.S., NEW YORK

A study of the silent subtle influence of personality will lead one into the realm of psychic phenomena. It is not the purpose of this paper to discuss the laws of suggestion from the above mentioned standpoint but to make a brief analytical study of personality and the effect of suggestion and appearances.

When one individual shakes hands with another for the first time a mental conflict takes place between two personalities. Usually the stronger dominating the weaker. The unfaltering step, the clear eye, the steady strong clasp of the hand, the manly bearing all creating favorable impressions proclaims the victor in this silent contest.

So operative is the law of suggestion in the dental office that, in choosing between personality and environment on the one hand and mere operative ability on the other, it is a question which would be the determining factor in the success of the individual. In discussing what a prominent place suggestion and personality occupy in the life of the

dentist I shall try to place the matter before you in a simple comprehensive manner grouped under the following headings:—

Location and Entrance. — Furnishings and General Appearances. — Fear and Pain. — Ability and Fee.

First impressions count for so much that the first step in a man's career with the possibility of failure or success depends upon his location and the manner of introducing himself.

I remember that some years ago I was associated with a physician in a town in Northern New York of about seven thousand where considerable gossip was started among the physicians over the entrance into their ranks of a new fellow practitioner. An undercurrent of jealousy sprung up and later reached a state of personal animosity that this new comer, fast getting on his feet and creating for himself an enviable reputation, should have accomplished so much by mere appearances. I recall that he located in the aristocratic part of the town in an imposing house with spacious verandas and well kept grounds. After his office hours (which he kept religiously) he ordered the stable boy to hitch up his finely bred, well groomed horse to the rubber tired buggy and he would start out to make what was apparently his afternoon calls. Being somewhat interested in his venture I followed him one day and found he made a regular circuit through the main streets of the town and returned home without having made a single call. He presented his wife to the best society. To-day he is a successful man and is reaping the reward of his foresight in making his entrance into that community a conspicuous event. So important is the question of location that in many small cities a change of a block or two from one side of the street to the other, may have a marked influence upon the success of the business.

Success so often depends upon what are apparently insignificant details that it is difficult to say at times why one man will succeed where another fails.

I knew a young man who while he always kept his office neat and clean, allowed his patients to pass through a dirty hall. He changed to a new building with janitor service and his business increased rapidly.

I recently called on a well known dentist in New York City who told me he arranged his suite in such a way that as patients passed from the reception room to the operating room they were able to see his entire equipment which was exposed to view. He said the suggestive value of such an arrangement was an excellent investment. There is a man in one of our large cities who almost wholly depends upon his location and office equipment to offset his lack of ability. He pays a very high rent and draws from the wealthy class. He can't do as good work as the man in the small town who only pays a rent of fifteen dollars per month.

From a business standpoint, why the difference in the degree of success of these individuals?

The suggestive value of appearances counts for so much to-day that the man in an out-of-date office even though possessed of more than ordinary ability can hardly acquire a lucrative practice. A patient came to me and said she had left her dentist because she thought he was dirty. She said she wondered if he ever washed his hands as she never saw him do it. This is when suggestion talks and talks loudly, yet many dentists never can see the necessity of having a basin beside the chair where they can wash in the presence of the patient.

Clean linen is as important as clean instruments. I state the following as a fact when I say that I know a man who spent eight thousand dollars to furnish his offices and sees from forty to fifty patients per week and economizes by limiting the number of towels per week to twenty. His assistants wash in the laboratory and use the dear old roller towel which is changed twice a week.

Furniture should be sanitary. The old, plush upholstered chairs are as out of date in a dental office as in a railroad coach. Mission or mahogany furniture upholstered in leather will not catch and hold dirt, is easily cleaned, and presents a neat appearance. Walls should be tinted and great care taken in selecting the color scheme as certain colors have a depressing effect upon both patient and operator. White enamel is sanitary but to many patients it is suggestive of a hospital. It lacks the warm tone possessed by mahogany. The whole atmosphere of an office should be suggestive of perfect order, dignity and quiet.

PERSONALITY OF OPERATOR

Usually the public places about the same estimate upon a man that he places upon himself. The man who believes in himself can convince the public. Confidence is an attribute common to all men who achieve the highest pinacles of success. The influence of a strong, pleasing personality upon patients is a great commercial asset. When a patient comes to you for the first time he is usually in a sensitive and critical state of mind. Your attention to him means much. He needs encouragement and sympathy and your hand shake and greeting are full of significance to him. If you wish to secure and retain him as a patient win his confidence by being openly frank and honest with him. Don't be afraid to offer him sympathy even if you don't feel it. Listen to him patiently and above all be agreeable. The man with a grouch has no right to be practising dentistry. Mental states are very contagious, and any way, it is highly probable that the patient feels the most justified in having a grouch.

PAIN AND FEAR

Fear is without doubt the strongest primitive emotion. It has played a very prominent part in our psychological evolution and as such it must be considered largely from a psychological standpoint. We, as dentists, neglect to consider the importance of this vital element which is so closely concerned in our relations with patients. We fail to take into consideration that a great host of people stay away from the dental office because they have been badly frightened, and hence hesitate to go again. To know how to control and banish fear is a valuable asset and here at least a limited knowledge of suggestion is imperative. Very few dentists are successful in controlling children because they do not possess knowledge of a few simple principles in psychology. This is also true in the case of adults but perhaps in a lesser degree. Win a child's confidence by being frank and honest with him and he will submit to an astonishing amount of pain. Don't ever say to him, "I won't hurt you." He only hears the word "hurt" and it frightens him. Also it may be necessary to inflict some pain, and by saying you won't hurt him your own progress is blocked. A lie may be inevitable at times but to deceive a child under such circumstances prevents you from winning his confidence or becoming his friend. Be master of the situation, kind but firm. Don't let the parent dictate or even take any part in controlling the child. You are expected to do the work and you are justified in using whatever means you consider necessary to accomplish your end.

Persons selecting a dentist consider the question of pain a very important one. The man who can do reasonably thorough work with little or no pain is in an enviable position. There are now so many means at hand for accomplishing good work with a minimum of discomfort that the man who ignores them is in a rut and out of the race. Let us make a brief analysis of this fear of the dentist.

Fear is one of nature's means of self preservation. Animals that are as the skunk and porcupine rarely experience fear. Fear causes a shrinking from pain, hence we find existing what might be called universal fear of the dentist. Much of this fear is merely psychological and the profession itself is largely responsible for this. A patient feels very helpless in a dental chair; his utter ignorance of the progress of the operation, his constant dread of what the next minute may bring forth, keeps him in a highly nervous and fearful state of mind. To tell a patient you won't hurt him and then to suddenly inflict pain is a sure means of destroying his confidence and creating in him a suspicious and skeptical state of mind. By careful operating and suggestion you can largely overcome the condition. Remember that fear is a destructive emotion and very

exhausting to a patient. Try to banish it and he will be your friend and add to your success.

The surgeon believes that he has no right to inflict unnecessary pain and uses all means possible to prevent it. The public has a right to demand that the dental profession do likewise.

ABILITY AND FEE

The suggestive value of ability should be understood and occupy a prominent place in the life of every professional man. The confidence a man has in himself should be known by others and the imparting of the knowledge of his ability is an ethical form of advertising.

We should at all times strive to make patients understand that it takes unusual operative skill and mechanical ability to perform dental operations in a painstaking and thorough manner. Few patients understand how difficult and nerve racking many operations are to the dentist. Nor are they able to discriminate between the degree of skill required to construct a removable bridge and that necessary to insert a simple amalgam filling. Many men fail to receive better fees because either through ignorance or false modesty, they are unable to do a little legitimate self advertising. No operation be it ever so simple should be spoken of as easy. This places a low estimate upon our work and confirms the opinion that much of the public has of us that we earn "easy money." It takes a high degree of skill and a delicate mechanical sense to successfully perform the large variety of operations the average man is called upon to do, and even to the most experienced practitioner, few dental operations could be called easy.

In conclusion, remember that in the dental chair as in few other places, a person is highly suggestible and because of his ignorance of the nature of the work to be done for him, he attaches the greatest significance to everything said to him.

Editor DENTAL DIGEST:

The Anti-narcotic Laws mentioned in the September number of your magazine, page 507, does not include cocaine but "chloral, opium or any of its salts, alkaloids or derivatives or any compound or preparation of any of them." The only way a dentist may secure cocaine is from the wholesale druggist on a written order; his prescription is not good. His word is simply a statement of the amount purchased and from whom purchased. I believe you have confused the cocaine law with the law, chapter 363, to amend the public health law pertaining to the sale of habit forming drugs, passed April 14, 1914.

I have looked this up as well as my local druggist.—T. H. F.



CLASS IN DENTAL PROSTHETICS, AUG. 29 TO SEPT. 12, 1914; DR. W. S. CUMMER, DIRECTOR

DR. CUMMER'S PROSTHETIC CLASS

On Saturday, September 12th at noon, a unique meeting of men interested in the prosthetic side of dentistry, came to a close, after a successful two weeks' study, observation, practical work (both chair and bench) and "conversation" along these lines. A very happy combination of progressive and congenial men availed themselves of the opportunity provided by Dr. Cummer and his associates, who are pictured on the opposite page, the names of which are as follows:

Upper row, standing. Doctors, John Hutchinson, London; G. D. Scott, Merrickville; J. Frank Adams, Toronto; Charles G. Scott, Toronto; W. A. Armstrong, Ottawa; W. S. McKay, Galt; T. F. Campbell, Galt; T. N. McGill, Toronto; Oscar W. Canning, Toronto; W. S. Westland, London.

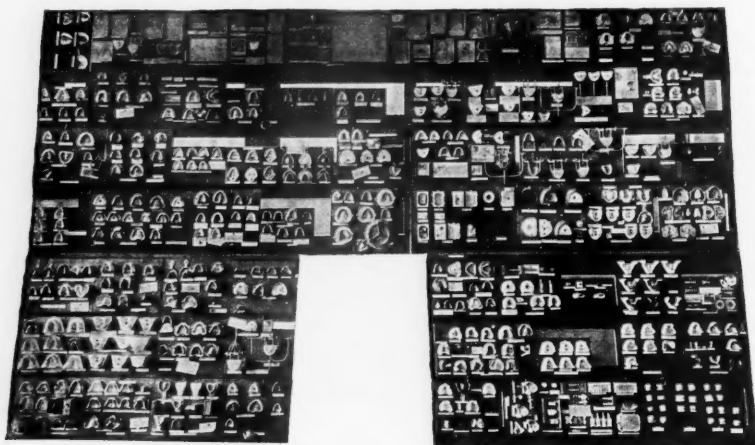
Middle row, standing. Mr. Chas. L. Daly, Toronto; Doctors W. D. Staples, Hanover, George S. Cameron, McGill University, Montreal; E. W. Oliver, Almonte; Chas. A. LeClair, Providence, R. I.; G. N. Howden, Watford; W. E. Lundy, Toronto; Charles Sutton, Toronto; W. C. Greenfield, Buffalo, N. Y.; H. E. Reynolds, Buffalo, N. Y.

Lower row, sitting. Doctors Hatton A. Robertson, Hamilton, R. O. Schlosser, Hartford, Conn.; Wallace Seccombe, Toronto; W. E. Cummer, Toronto; George H. Wilson, Cleveland, Ohio; M. A. R. Thomas, London; Frank C. Harwood, Moosejaw, Sask.

From the beginning to the end of the two weeks the greatest interest and enthusiasm was manifested in the work which was planned as follows: A sufficient number of patients were provided, giving a full upper and lower case to each three men and allowing them as much practice and experiment in any of the phases of advanced impression work and Gysi anatomical work as they desired. Enough technique covering the whole of partial denture — removable — bridge construction was provided, so that each moment could be utilized to advantage by each member, and resulting in a course sufficiently elastic as to suit the individual needs of each member, giving each the opportunity of seeing the whole, so that he might supplement his technical equipment wherever necessary, as well as acquiring a few demonstration models, the result of his work. A lecture, three clinics, and five hours' infirmary and laboratory work made up the working day.

In addition to those subjects the following were included—Manipulation of all well-known laboratory materials; manipulation and use of well-known teeth and facings, &c. In prosthetics, metal bases of all kinds, full and partial, obturators, various attachments for partial denture and bridge work including Roach, Gilmore, stud, interproximal clasp, rests, &c. Grinding and staining for matching natural teeth; carving and festooning with tinfoil, Webster splint for fracture, and others of minor importance.

Dr. George Wilson of Cleveland, the author of the text-book "A Manual of Dental Prosthetics," gave a very able presentation of the subject of plaster, vulcanite, and esthetics, embodying the results of years of experiment and study in these fundamentals including lecture, demonstration and lantern slide exhibit, supplemented with a collection of very fine models. Incidentally it may be noted that from recent development as shown by Dr. Wilson, the plaster cast or model will soon become a thing of the past in a large number of prosthetic restorations.



The above represents one of the largest collections of prosthetic models on the continent, the property of the Royal College of Dental Surgeons of Ontario, for use in the Prosthetic Department of that school and used an accessory in Dr. Cummer's course. The sets of models showing the construction of the various pieces (sixty-three in all) are mounted on wooden panels of 8"x12", 12"x15", 12"x24", (depending on the number of models in the particular set), and exhibit the various processes in consecutive order, with printed description underneath, from the first operation to the finished piece. The collection embraces nearly seven hundred models, showing principles of construction of practically everything worth while in modern prosthetics. It covers an area of about one hundred square feet and additions are constantly being made.

Dr. Wallace Seccombe presented the subject of Dental Economics in a particularly comprehensive and able manner. Embracing as it does the whole of our professional work and life apart from its technical side, those whose privilege it was to hear these lectures could not fail to receive from them much practical knowledge. The lecture heads included General and Dental Economics, the estimation of proper value of dental service from various costs, overhead charge, costs of various known dental operations and methods of determining the same, office administrations and ac-

counting, including arrangement and equipment, choice and use of an assistant, investments, and many other details.

The greatest interest and enthusiasm was also manifested in the Gysi System of Anatomical Articulation and in the Greene-Supplee Method of impression work followed by the class, as the characteristically accurate and mechanically correct results became manifest.

During the class the following offices were very courteously placed at the disposal of the class for inspection, much to the interest and profit of each member—Doctors Capon, Colter, Coram, Cummer, Gow, Hume, McLaughlin, Mallory, McDonagh, McLean, Pearson, Stewart, Webster, Zinkan, and the laboratory of Mr. C. L. Daly.

To quote from a letter received by the editor of the *DIGEST* Dr. Cummer says:

"The class was a success from every standpoint and I feel very happy over it, not only on my own account but also on Professor Gysi's account, yours, and your associates.

"The enthusiasm was simply great and I feel that these men will all become centres for scientific articulation as well as for other lines of good prosthesis, and that in time articulation as we know it will be the rule. The results we obtained were exceptionally good." . . . "From the first handshake to the final three British cheers we received nothing but kindness."

During the session the class was the recipient of brief visits from Drs. A. E. Webster, Dean Willmott, Dr. C. N. Johnson, of Chicago, and others.

As an outcome, another class conducted upon similar lines is being organized and is now partly filled for the summer of 1915, embodying the results of the experience of the 1914 class, in addition to new features which will appear between now and then. The 1914 men were as follows:

Doctors J. Frank Adams, Toronto; W. A. Armstrong, Ottawa; G. S. Cameron, McGill University, Montreal; T. F. Campbell, Galt; O. W. Canning, Toronto; W. C. Greenfield and H. E. Reynolds, both of Buffalo, N. Y.; Frank C. Harwood, Moosejaw, Sask; G. N. Howden, Watford; John Hutchinson, London; Charles A. LeClair, Providence, R. I.; W. E. Lundy, Toronto; T. N. McGill, Toronto; W. S. McKay, Galt; E. W. Olive, Almonte; Hatton A. Robertson, Hamilton; R. O. Schlosser, Hartford, Conn.; Charles G. Scott, Toronto; G. D. Scott, Merrickville; W. D. Staples, Hanover; Charles Sutton, Toronto; M. A. R. Thomas, London and W. S. Westland, London. Doctors, Harold Clark, and L. G. Smith of Toronto; S. H. Simpson, Kingston, G. W. Everett, and Spencer Clappison of Hamilton were prevented at the last moment from attending.

THE RELATION OF MEDICINE TO DENTISTRY

BY WILLIAM J. LEDERER, D.D.S., NEW YORK CITY

Dental Consultant to the German Hospital in New York

FIRST PAPER

Is dentistry a profession distinctly separate from medicine or is it a specialty of the art of healing? This question has caused much discussion and both the negative and affirmative replies claim supporters. Webster defines a dentist as "One whose occupation it is to clean and extract teeth, and to treat them when they are diseased." This definition, though inadequate, makes a dentist a specialist in the Art of Healing, as the curing of the ills of any part of the human economy is a part of medicine.

Those who call dentistry a mechanical art consider one of the branches, prosthodontia, as the entire field and forget that before any prosthetic appliances can be inserted, pathologic conditions of the teeth and mouth must be treated. Prosthetic appliances are not required in all instances as many cases present for the alleviation of pain demanding surgical interference or medicinal treatment. Dentistry in reality is, therefore, a special branch of medicine, just as the treatment of diseases of the eye, ear, or throat, for the buccal cavity is subject to all those lesions which may affect other parts of the body, and the skilful treatment of buccal and dental disease requires training in diagnosis, pathology, materia medica, and therapeutics. The progressive dental practitioner should be interested in all things medical and he must follow the progress of general medicine. He should not confine himself to the reading of his dental journals, but a good medical periodical should be a part of his library. Just as other practitioners visit medical bodies other than those of their specialty, so should the dental practitioner attend medical meetings to widen his mental horizon.

Whichever view a man may hold, whether or not dentistry is a medical branch, the fact remains, that if he wishes to practise dentistry intelligently, and not merely extract teeth and replace them mechanically, he must acquaint himself with the principles of general medicine, as it is contrary to all reason to separate diseases of any part of the body from general pathology. No matter how artistic a prosthetic appliance a dentist will create, or how nearly perfect he may be able to insert a filling, if he withdraws from medicine, he ceases to be a scientific man and becomes an artisan.

On the other hand, it becomes necessary for the conscientious physician to pay attention to dental problems as the intimate relationship between

buccal and dental conditions and pathologic states of other structures, is established and recognized. Numerous conditions which baffled the physician are cleared up due to the cognizance of this relation. A better understanding between dentist and physician and a little more interest in their respective activities, will bring about better results for both the specialist and general practitioner.

With these thoughts in mind the writer offers the following series, fully appreciating the immensity of the subject and being cognizant of many necessary omissions and shortcomings, for the chapter of the Relation of Medicine to Dentistry will not be closed until the dentist knows all there is to know in medicine and the physician is fully acquainted with dental problems.*

NUTRITION A FACTOR IN TOOTH DEVELOPMENT

It is a well-known fact that lesions of peripheral organs can often be linked with systemic disease, and in the progress of medicine many symptoms that were formerly treated as local disease have been recognized to be produced by systemic conditions. In this progress of the recognition of disease, its symptomatology, etiology, and treatment, a factor has been overlooked, or rather its various conditions and relations to systemic disease have not been allotted the prominence in symptomatology it actually deserves. This factor is the condition of the teeth and the relationship these organs may bear to systemic disease.

Dentistry, as an individual calling, has within the last twenty-five years made greater strides than perhaps any other branch of the art of healing, and from the mere mechanical replacing of lost organs for the sake of cosmetic effect, it has developed into dental and oral surgery, with a symptomatology and *materia medica* of its own.

From year to year fewer teeth are sacrificed, oral conditions are better recognized and more successfully treated from the oral specialist's point of view, but the actual coherence of certain dental, oral, and systemic conditions has not been as fully recognized as is necessary to obtain perfect results from both the medical and dental point of view.

That the teeth are affected by systemic conditions is true, for any pathological condition that will alter the metabolism of the body is bound to bring about changes here as well as anywhere else, as the teeth are part and parcel of the human economy, and receive their blood, lymph, and nerve supply from the same sources as the other parts of the body. Were it not so, how can we account for the variations in the dental organs of different temperaments, as one finds variations in cranial contour,

*The writer cannot better express his views on a part of this subject than by quoting the following extract from one of his articles in the *Medical Record*.

general framework, muscular development, or quality of the voice? Thus the long, fine, bluish tooth is found in subjects with a prominent, not broad, but expansive chest; and the rather broad, unshapely, opaque, and muddy-colored teeth in subjects with a large chest, though lacking in expansive power, showing that all factors exercising influences upon the system at large will also reflect upon the teeth.

Hutchinson long ago recognized the peculiar appearance of the teeth in inherited syphilis, and the atrophic changes affecting the teeth after diseases like typhoid fever, rickets, and sometimes scarlatina and measles, are also well enough known. Odontalgia in a sound tooth, as the result of some distal irritation, so often met with in pregnant women, hardly needs any mention. Still all these dental affections were at some time considered local lesions, and only in course of time was their true etiology recognized. Thus there are conditions which the dentist meets to-day, and often hopelessly tries to combat with local treatment, which undoubtedly will some day be recognized as associated with and caused by some systemic trouble.

Pyorrhea alveolaris is a condition about which many theories have been advanced. What is it? A condition in which there is a hyperemic, flabby condition of the gums, a purulent discharge from the alveoli with the formation of distinct pus pockets, loosening of the teeth, and destruction of the alveolar walls. The usual treatment consists in the removal of all deposits and the sterilization of the pockets and alveoli and the local application of stimulants and counter irritants, to induce a return to the normal. The success attending the treatment of the disease is limited because the actual cause is not always established. The deposits which so frequently are looked upon as the actual cause of the trouble are but exciting causes. Miller and other investigators attempted to isolate a micro-organism specific to the disease, but failed. The condition is frequently associated with uric acid diathesis and diabetes mellitus. It is a local manifestation of some perverted function present in these diseases.

Success in the treatment of oral diseases cannot be obtained unless the etiology of these conditions is thoroughly understood. This offers a broad field for investigation to both medical and dental men, and those who succeed in clearing the fog will not only be benefactors to suffering humanity, but they will be disciples of Æsculapius in the true sense of the word; not only will they be healers, but they will also be preventers of disease. The greatest triumph of medicine is not the curing, but the prevention of disease.

The various conditions affecting the teeth can be classified as affecting the dental organs during certain periods of life, namely:

1. Those conditions bearing influence upon the teeth during intra-

uterine life; this would be the period beginning with the first appearance of the epithelial inflection in the embryonal jaw (thirty-fourth to fortieth day) and ending at birth, the prenatal period.

2. Those conditions affecting the denture during infancy and childhood, *i. e.* during the period beginning at parturition and ending with the eruption of the first permanent tooth.

3. Those conditions affecting the teeth from the time of the eruption of the first permanent tooth till death or such time as the teeth are lost.

It is evident that in the first class, the conditions affecting tooth development are factors conveyed by the fetal circulation and are traceable to the mother. Any condition affecting the maternal blood is liable to have a reaction upon the embryo and fetus, and consequently modify tooth development. It therefore follows that the health of the mother during gestation is an important factor conducing to normal tooth development, and any pathological conditions present must be considered and corrected. All conditions which will lower the vitality of the mother are bound to affect the child *in utero* in some way, and the developing dental organs being part and parcel thereof, receiving blood supply from the same source, will consequently be modified if there be any aberration from the normal in the blood, chemical or physical.

The first indication of the future denture is observed about the thirty-fifth to the fortieth day of intrauterine life, when there appears an ingrowth of epithelium extending along the whole length of the jaw, rapidly extending into the mesoblastic tissue. This growth of epithelium assumes the shape of a flask, that is, it broadens downwards and is rounded off. This is known as the enamel organ; soon there appears, a cell proliferation in the mesoblastic tissue, pushing its way into the bottom of the flask, crowding into the same, so that the epithelial growth covers the mesoblastic tissue like a cap. This mesoblastic cell invasion is known as the dentine papilla, as it forms the future dentine, and the enamel organ is the precursor of the outer covering of the crown of the tooth. There are now two distinct structures, an epithelial body (enamel organ) and a mesoblastic body (dentine papilla). The cells of the enamel organ now undergo a series of differentiations; the innermost layer is arranged as columnar epithelium and is called the enamelblastic or enamel-forming layer; the cells of the outer wall remain cuboidal. The cells between the two become much distended, and on account of their appearance have been termed the stellate reticulum. The enclosed dentine papilla also undergoes cell changes and there appears a peripheral layer of columnar cells which become dentine-forming cells, termed odontoblasts. By the time that calcification begins there is formed a capsule-like investment surrounding both the enamel and dentine organs. When this sacculus is

fully formed, it is made up of an outer and inner wall, both very vascular. The outer wall becomes the dental periosteum, while on the inner wall especially in the vicinity of the roots, osteoblasts appear and are calcified into cementum. By the time the crowns of the teeth are formed each tooth is incased in a crypt of bone, developed around, but at some distance from it; the crypt is open towards the gum, shielded by fibrous tissue. The permanent teeth are contained in the same crypt as the temporary teeth, but later become separated from them by a bony septum. The first appearance of epithelial inflection, according to Tomes, takes place about the seventh week of intrauterine life. The dentine papilla grows into the enamel organ about the tenth week. At eleven and a half weeks all the temporary tooth germs are formed. Having formed, so to speak, the organic network of the teeth, at about the twentieth week calcification of the teeth begins. Calcification, according to Sudduth, is that process by which organic tissues become hardened by deposition of lime salts in their intercellular substance, as exemplified in the formation of bones and teeth. The intercellular substance in organic tissues is fluid, and into this fluid, particles of lime salts are deposited in regular systems, after the several forms of calcified tissues. This arrangement is superintended by specialized cells for each particular structure—osteoblasts for bone, odontoblasts for dentine, ameloblasts for enamel, cementoblasts for cementum. A great deal more could be said about tooth development and calcification, but for a careful study I would refer the reader to special works on this subject. The above will suffice for the present if it is but borne in mind that the various osteogenic cells derive their food supply from the blood.

To obtain a normal organism, three factors are essential: (1) Normal formative organs; (2) normal nutritive fluid; (3) normal physiological function. This, of course, also pertains to the dental structures. There must be normal formative organs, *i. e.* there must obtain a normal enamel organ and a normal dentine papilla—in short, there must be a normal tooth germ. The second essential factor is a normal nutritive medium, which is the blood—and there must obtain normal physiological function, which in turn is dependent upon the normal nutritive fluid.

Abnormal formative organs may be rendered so by (1) degeneration due to lack of use, producing atrophy; (2) to heredity; (3) to accident; (4) disease may also produce abnormal formative organs, as it is said that the pits and ulcer-like marks in the enamel of defective teeth are the sequence of ulcerous points upon the tooth follicle where formation was impeded during an eruptive fever.

The second factor—normal nutritive fluid (and that means blood) is even more important than a perfect formative organ, as upon the nutritive

fluid depends the health of the future organ. An abnormal formative organ, properly nourished, and developed, becomes an ill-shaped, but still a useful, healthful organism; whereas no matter how perfect the formative organ may be, when nourished by an unphysiological nutritive fluid it is bound to develop into an abnormal pathological organism. To obtain normal formative organs is beyond our control, excepting to utilize the precursors or parent organs so that no retrogression in reproduction will result.

Professor Talbot, in a masterly essay on "Interstitial Gingivitis (Riggs Disease), speaks of the natural predisposition of the oval structures to disease, and says: "Because of man's advance in evolution, and because of the local degeneracies thereon resultant, through the law of economy of growth whereby one structure is sacrificed for the benefit of the organism as a whole, the face, teeth, gums, alveolar process and periodontal membrane (being variable structures) are predisposed to disease in their very order of evolution.

"The jaws are growing smaller because large ones are not required. The structures are changing shape to adapt themselves to the new environment. Thus, instead of large broad jaws with low vaults, short broad alveolar processes in plenty of blood supply and vitality to resist mastication; teeth short with large bell crowns to give plenty of room between the roots for considerable thickness of the alveolar process for the nourishment of the periodontal membrane and support and protection of the gum tissue—small, narrow jaws occur with apparently high vaults; long, slender and thin alveolar processes, which are not used in mastication with sufficient force to carry blood for the nourishment of the tissues. The teeth are changing their shape, causing the roots to come closer together, and thus lessening the area of the alveolar process.

"Since man has not adjusted himself to his new environment, the face and jaws may be said to be transitory structures. The teeth in some of the lower vertebrates develop continuously. That is, they come into place, possess large foramina, serve their purpose, are shed and new teeth take their place. This is continued throughout the life of the animal; unlike this, man has but two sets. The first teeth erupt; the alveolar process builds itself about the teeth to hold them in place. These are shed, the alveolar process absorbs, the second set appear and the alveolar process builds itself about them to hold them in place. When the second set are lost the alveolar process is again absorbed.

"I have demonstrated this absorption many times upon dogs. Whether it is due to an erupting tooth, the movement of teeth by wedging, correcting irregularities, after extraction orthosteoalacia, it is invariably an inflammatory process. The building up and tearing down of the alveolar

process also demonstrates it a transitory structure. This, together with the evolution of the face, makes the alveolar process doubly transitory. So sensitive is the alveolar process to inflammation and absorption, that the slightest irritation, whether local or constitutional, will set the osteoblasts at work.

"The teeth are virtually foreign bodies in the mouth. The tendency is to shed the second set as a result of avatism. The foramina are nearly closed; hence the blood pressure in the pulp is *nil*. The blood-vessels extend through the alveolar process and peridental membrane and stop short. Nourishment ceases, the teeth are like ivory pegs set in the jaws. In the study of the evolution of the pulp, their attachment and the use of the teeth in the scale of evolution must appeal to every scientist that the law of economy of growth resulting in degeneracy is very apparent. The blood-vessels and new tissues therefore, at this locality, may be called terminal structures. These blood-vessels do not run straight through the bone, but ramify in all directions forming loops or plexuses and are intimately connected, with the peridental membrane and gum margin."

If it is not in our power to determine normal formative organs, we can, however, at least partially create and maintain a normal nutritive medium—normal blood. What is meant by normal blood? Blood which contains all those substances that are necessary for the maintenance and growth of the organism in physiological, *i. e.* assimilable, form and in physiological quantities. Inasmuch as dental development begins before the second month of gestation is reached, it is evident that dental prophylaxis should be installed before calcification commences (about the twentieth week), as it is not within our reach to direct the formation of normal development organs. We can, however, by dietary and hygienic measures and proper medication, alter any abnormal condition of the mother's blood so as to bring about or create a normal blood condition, excepting in some forms of chronic disease. If the blood condition of the mother be rendered normal, it is safe to assume (granting that no organic lesion or chronic disease be present) that embryological and fetal development will be normal, and consequently the resulting denture will be healthy. This was recognized some time ago, and caused dental prophylaxis to take a new direction. The dentist, instead of prescribing calcium compounds (when his patients complained of soft teeth), advised his pregnant patients in order to insure the child *in utero* a full dose of calcium salts—to take lime salts internally during the whole period of gestation. With what results?—

150 E. 74th STREET.

(The next article is expected to be published in the January, 1915, number).

**THE WISCONSIN DENTAL PROTECTIVE ASSOCIATION TO
PROTECT WISCONSIN DENTISTS**

By E. A. GEILFUSS, D.D.S., MILWAUKEE, WISC.*

My attention has been called to your editorial in the September DIGEST headed: "Doctor Taggart Wins Suit For Infringement" and inasmuch as some of the deductions you make therein appear, to at least some of us, erroneous, I have been asked to communicate with you and to request that you give this letter full publicity in your journal.

First of all, those of us who were active in the organization of The Wisconsin Dental Protective Association were influenced not by a desire to save the fifteen dollar license fee for the use of the method of casting inlays which Doctor Taggart claims is his, but by the fact that we considered that Doctor Taggart's patents had not been proven valid by the courts and that we felt that a great principle affecting our profession was involved.

I believe that I am correct in stating that practically all members of the dental and medical profession are opposed to process patents as applied to the healing arts. A process patent used in this connection has been defined as "a tax on a man's manipulative skill," and I think the definition a good one. Unfortunately our laws at the present time still recognize such patents, therefore when they are granted, our only hope to escape from oppression is to prove that such patents are invalid either because of priority of use or otherwise. All who are at all familiar with dental history know what the so-called rubber patents meant to our profession and subsequently the activities of the International Tooth Crown Co., owners of patents covering different phases of dental crown and bridge work, in their efforts to engraft upon the profession a system of licenses and royalties. The owners of these patents swept everything before them until, largely through the efforts of Dr. J. N. Crouse, the Dental Protective Association of the United States was formed and through its work succeeded in overthrowing these patents after long litigation.

Doctor Taggart's first patents were granted on December 3, 1907. Exactly when he started or gave indications of his intention to start suit for infringement against Doctor Boynton of Washington, D. C., I do not know, but judge it was some time prior to July, 1908, for I have before me a copy of a letter from Doctor Crouse to Doctor Finley dated July 22, 1908, the original of which I have had in my hands, in which Doctor Crouse says: "The Protective Association does not intend to take up

*President of the Wisconsin Dental Protective Association.

any more patent fights—in the first place to do so would necessitate a great lot of work in the way of increasing our membership to get funds to carry on the work, if it were wise to do so anyway which is questionable; in the next place I cannot afford to give any more time in that way to the profession."

Because of the refusal of the Dental Protective Association, through its president Doctor Crouse, to undertake the burden of testing the validity of the Taggart patents, Doctor Finley and others constituted themselves a committee to solicit funds from the profession to do this highly important work.

This committee organized the National Protective Association, incorporated in April, 1911, which conducted the defense in the Taggart-Boynton suit. The appeal for members throughout the country did not meet with the result which the cause deserved, probably because on December 5, 1910, the Dental Protective Association through its directors had entered into an agreement with Doctor Taggart whereby Taggart agreed to license members of this association to use his patents upon payment of fifteen dollars (\$15.00). The membership in the Finley organization never exceeded four hundred and of this number about 50 per cent. were in the states of Minnesota and Wisconsin. Notwithstanding this meager membership and the consequent lack of funds, through the strenuous efforts of Doctor Finley and his associates the defense in the Boynton suit was carried on until on February 25, 1913, the Court of Appeals of the District of Columbia unanimously decided against Taggart.

On June 2, 1913, Taggart's suit against Moll came on for trial in Chicago. The National Dental Protective Association was unable to effectively interest itself in this case, because of a depleted treasury and lack of support on the part of the profession. The suit was poorly and inadequately defended and resulted in a decision in Taggart's favor and subsequently damages to the amount of one thousand eight hundred fifty-seven dollars and fifty cents (\$1857.50) were assessed against Moll by the Master in Chancery.

At the meeting of The National Dental Association held in Kansas City on July 11, 1913, the following resolution was introduced by me as the delegate from Wisconsin and passed by the House of Delegates:

"In view of the fact that the decision in the highest court of the District of Columbia to which the Taggart-Boynton case could be carried resulted in as complete a sustaining of the defense as could be attained, to the effect that the Taggart patent was invalid and inasmuch as more recently in Chicago in a suit embodying the same and three other patent claims, the decision in a lower court upheld the Taggart

claims, it seems advisable to get an expression of as representative a body as this, as to the justice of the contentions to have the validity of these patents determined by the highest court:

"Therefore, be it resolved, that the House of Delegates of the National Dental Association endorses the action taken by the National Dental Protective Association in their efforts to have determined the validity of these patents."

At a meeting of the Dental Protective Association held at the Palmer House in Chicago, May 22, 1913, a report was read showing that Dr. Crouse had turned over to Taggart sixty-fivethousand dollars (\$65,000.00. At fifteen dollars (\$15.00) per license this would indicate that four thousand and three hundred thirty-three (4,333) dentists had availed themselves of the agreement made by Dr. Crouse in behalf of members of the Dental Protective Association.

The Taggart process patents, the attitude taken by Dr. Crouse and his fellow directors of the Dental Protective Association, the efforts made by Dr. Finley in his defense of the Taggart-Boynton suit and the formation of the National Protective Association have been matters that greatly interested the dental profession in Wisconsin for the past three years. We have felt that a great principle was involved and that our profession faced a more serious matter than any it has had to face in years. We have endeavored to get full information regarding both sides of the question and to arrive at unbiased conclusions. A committee of the Milwaukee Odontological Society to whom this matter was referred early in 1912 after a conference with Drs. Crouse, Johnson, Buckley, and Taggart in Chicago on May 8, 1912 and after correspondence with Dr. Finley and others, reported that for those of the dental profession who as a matter of principle were opposed to process patents and who valued their self respect and felt that they owed anything to the respect they desired their profession to command, it seemed incumbent that they support the efforts to have these patents tried by the courts of final resort, if necessary. To those on the other hand, who looked for the easy way, the proposition of becoming licensed by the payment of fifteen dollars (\$15.00) offered cheap insurance.

Inasmuch as the Crouse protective organization had by its contract with Taggart tied its hands as to testing the validity of the Taggart process patents and the National Dental Protective Association had been unsuccessful in its efforts to gain a membership large enough to make it possible for it to undertake the defense of those sued in the future, the Wisconsin Dental Protective Association was organized under the auspices of the Wisconsin State Dental Society, the Milwaukee County Dental Society, and the Milwaukee Odontological Society to protect

Wisconsin dentists, who had not taken out licenses under the Taggart patents, if sued. This association received its charter from the state, September 8, 1913, and is at present actively engaged in its efforts to have every dentist in Wisconsin join its ranks. It has among its members most of the ex-presidents of the State Society, and practically all the present officers of the State Society and the board of dental examiners, as well as most of the prominent men of the state. Its ranks are constantly swelling but unfortunately our greatest handicap is the lethargy of the average dentist to interest himself in a matter that costs money until he is directly attacked. Even before our incorporation, in fact ever since we have realized that the old protective association was not to be depended on in the matter of protecting the profession against the exactions of invalid process patents, we have endeavored to arouse the profession in other states to the necessity of organizing. Our experience prompted us to advocate the formation of state protective associations, hoping that later on these state organizations might be welded together into some national federation and that if in the future the National Dental Association felt that the time was ripe, this national federation of state protective associations might become a department of theirs.

Herein again unfortunately the results attained have not, as yet, been what we might have wished. There has been too much lethargy and failure to recognize the grave issues involved. Then too, in many communities the men who are usually most active in these matters having to do with the vital interests of the profession, had availed themselves of the immunity purchased under the Crouse compromise before they thoroughly analyzed what their doing so meant, and consequently are not now apparently interested. Also we feel that the journals have not done what might be expected of them in the effort to arouse the profession to the gravity and importance of the crisis which it is facing.

Within the past three months, renewed interest has been awakened in Chicago and its environs, through the starting of new suits by Taggart. The Dentists' Mutual Protective Alliance which was organized to undertake the defense of those sued and which has already attained a very satisfactory membership was made a party to these suits.

On August 28, 1914, at their meeting at Culver, the Northern Indiana Dental Society took steps to organize the state of Indiana.

We have reason to believe that similar steps will be taken shortly in Missouri, Minnesota, Iowa, and Nebraska and we hope in other states as well.

It is very essential that the dental journals inform the profession of the country of these measures, and I trust we can count on the *Digest* in this respect.

EXEMPTION OF DENTAL APPLIANCES FROM LEGAL
PROCESS

BY A. L. H. STREET, ST. PAUL, MINN.

FIFTH PAPER

Although it is seldom that a dentist is found in such an unfortunate condition that he is required to invoke legal exemptions against an attempt to enforce payment of a debt due from him, it should prove interesting to every member of the profession to know the general extent to which the law throws a protecting arm about his family.

Originally, there was no exemption of property from judicial sale for the satisfaction of a judgment against the owner, but in most of the states there are now in force laws which afford a limited protection in this respect, although in some jurisdictions, notably in New England, little or no exemption is allowed. The benefit of these laws extends primarily to a debtor's wife and children; not being intended to shield him from any degree of liability for the payment of his obligations.

Space will not permit the writer to even summarize the differing provisions of the exemption laws of the several states, but it is hoped that the following observations, which will be found to have general application in most of the states, will prove of interest to the reader.

In probably no instance does an exemption law expressly exempt a dentist's appliances, etc., from forced sale. The privilege is found to rest upon protection extended to professional men, mechanics, etc., generally. If the language of a particular statute is susceptible to reasonable interpretation as including a dentist's appliances, etc., an exemption will be declared to exist; it being the policy of the courts to give a liberal construction to the laws to effectuate their beneficent purpose. Thus the Louisiana Supreme Court has decided that the instruments and sign of a dental surgeon are not subject to seizure to satisfy an ordinary debt, although a landlord is entitled to seize of the property to discharge a claim for rent past due (6 *Louisiana Annual*, 789). But a dentist's chair has been held by the Georgia Supreme Court not to be exempt from judicial sale to satisfy a judgment against him, as a "common tool of trade" within the meaning of the exemption law of that state, nor as a chair suitable for the use of his family, within the terms of the same law, although the court did hold that the chair might be set apart under another provision of the same law which entitled a debtor who is the head of a family to claim \$1000 worth of property as being exempt (46 *Southeastern Reporter*, 828). And, in an earlier case, the same court decided that another dentist was not privileged to claim a piano and guitar as a

"tool of trade." He, also, unsuccessfully asserted that these instruments were exempt because his wife was a music teacher. The court said that his right to professional exemptions must rest upon his own, and not his wife's vocation (16 Georgia Court of Appeals, 479). The Texas Court of Civil Appeals, having decided that a physician was not entitled to claim a typewriter, although it was used in his business correspondence (66 *Southwestern Reporter*, 582), it follows that in that state at least a dentist could not claim a typewriter as being exempt. But, ordinarily, a dentist's technical books and instruments, safe, desk, etc., are within the terms of the law (New York Supreme Court, 92 New York Supplement 56).

If a practitioner is engaged in more than one business pursuit, he will not be permitted to claim an exemption as a dentist unless the dental profession is his *principal* vocation.

In addition to provisions exempting professional appliances and household goods, many of the laws permit a debtor who is the head of a family to claim other personal property aggregating a fixed amount of value.

When certain articles are exempt, the debtor may claim the proceeds of a sale thereof as exempt, if he intends to reinvest them in exempt property. And insurance proceeds have been declared to be, also exempt (52 *Pacific Reporter*, 777).

The courts of Kentucky and Michigan have decided that a member of a partnership is entitled to claim an exemption in the property of the firm, if the same property would be exempt in the hands of an individual, but the courts of most of the states, including South Dakota, Arkansas, Indiana, Missouri, Nebraska, New Hampshire, and Texas hold the contrary. According to a decision of the Wisconsin Supreme Court, partners may divide the firm property between them, so as to entitle them to claim individual exemptions.

Under most of the laws, there is no exemption against a claim for rent, necessities or the purchase price of the thing which the creditor seeks to have sold to satisfy his claim.

A married woman conducting business in her own name will not be permitted to claim an exemption, unless she has taken charge of the business affairs of her family in such way as to constitute her the real head of the family. To constitute a dentist the head of a family within the spirit of the exemption laws, it must appear that some one is actually dependent upon him, and that he is either legally or morally bound to support such person.

Exemptions being designed for the benefit of the debtor's family, he is ordinarily without power to surrender the right by agreement to waive

the privilege unless his wife joins in the waiver, but a lease of an office to be used by a dentist may validly give the landlord a lien for rent. And the exemption is lost if it is not asserted when attempt is made to levy on the property. An officer, in serving legal process, is bound, however, to know what articles are expressly exempted by law, and can be held liable for taking them. But if the debtor is merely given the right to select property of a certain value, he must point out what property he claims to be exempt. An exemption of dental appliances is lost, if the owner abandons the practice of his profession.

"TO R. C. M."

BY SAMUEL M. MYERS, D. D. S. WACO, TEXAS

In the August issue of the DENTAL DIGEST, page 474 "R. C. M." of North Berwick, Maine, cites a case of an "oldish" lady wearing full upper and full lower dentures, and complaining of sudden severe twinges of pain in the left side of her superior maxilla along the gums.

Several years ago I had a case very similar to this one. A man about fifty years of age, wearing full upper and lower dentures, presented for treatment. These plates appeared to fit well and the articulation was good, but the old gentleman carried the plates in his pocket most of the time. He suffered from sudden, very severe burning twinges of pain, always starting in the left upper maxilla and shooting upwards through the left side of the face and terminating in the occipital region. He had these paroxysms every few minutes, day and night when awake, and when he conversed with you he would have them almost continuously.

He complained that the slightest movement of the lip against the gums on that side would start the paroxysm, at which time he would slap his hands to his face and rub his face and head on that side, as though his very life depended upon it. The pain was so severe he could scarcely endure it. He had been treated for this trouble by a physician for some months, and was then taking codeine, but it gave him no relief.

I found that the pain started in the bicuspid region every time. The gums were apparently healthy, and there was no visible sign of irritation. Pressure on the gum anywhere from the bicuspid region to the tubercle would precipitate a paroxysm immediately. I finally began at the bicuspid region and examined the ridge very minutely back to the tubercle, stopping frequently for the paroxysms to subside, without finding anything that would point to the cause of the trouble. I now examined the tubercle closely and on the back side of it I found a tiny inflamed spot about the size of the cross section of an ordinary pin. This I found to be

a fistulous opening into which I passed a small probe and found necrosed bone. I curved the probe and passed it forward along the ridge through necrosed bone for more than half an inch.

I dissected back the gum tissue and burred out the necrosed bone to, and including, the bicuspid region to the depth of about three-eighths of an inch. Here the necrosed bone stopped abruptly along the ridge, and the probe turned at right angles and passed into the antrum. At last I was at the seat of the trouble. The antrum had become diseased and the pus had burrowed its way through the antrum and along the maxillary ridge and established an opening in the tubercle.

Along this tract the sharp spiculæ of necrosed bone would irritate the minute nerve terminals, thus causing the sharp burning pains to shoot upward through the face and back over the head. The canal now went through bone into the antrum. This dead bone did not come into contact with the soft tissues.

The patient flatly refused to have the antrum treated, so I filled the "ditch" with bismuth paste and dismissed the patient for two days. When he returned he could talk for a longer time without pain, and when the pain did return it would cause only a slight twitching of the muscles of the face. After a few days I dismissed him, at the same time admonishing him to have the antrum treated. I saw nothing more of him for about a year, when one day I met him on the street and asked him how he was getting along. He told me that he had had no trouble since one month after I had operated. He had not had the antrum treated, and I do not know whether that antrum has ever found an "outlet to the sea."

AN ACHE IN THE JAW

About a year and a half ago a patient came to me with some decayed teeth and complaining at the same time of neuralgia. I filled his teeth without any good results. I then devitalized those teeth that seemed to be causing the trouble (treated the root canals properly); this did not seem to be effective. He had only about 6 or 10 teeth, all anteriors, excepting 1 molar. All of these teeth were worn down (upper jaw). I extracted the teeth above and within a few days he complained of his eyes failing him—this man was addicted to drink. The gums healed in the usual time and now his eyes are about well.

Just over the sockets of the cuspids there is a tenderness of the gums, so he says, and he cannot wear a plate. This tenderness extends down opposite the place where the apex of the cuspids were before extraction.

If there is any remedy by which this condition may be corrected I would greatly appreciate knowing it.

ARKANSAS.

**CORRECTION OF AN ERRONEOUS STATEMENT
CONCERNING CHRISTIAN SCIENCE***

BY R. R. S., TOLEDO, OHIO.

In the August number of the DENTAL DIGEST, is an article by Percy Norman Williams, D.D.S., New York, entitled, "Local or Inhibitive Anæsthesia" page.

In closing his able criticism of the matter under discussion, Dr. Williams takes a parting shot at a subject with which he is evidently, wholly unfamiliar.

The statement objected to is here quoted verbatim—viz: "The universal law of suggestion is the fundamental principle upon which rests Christian Science, Faith Healing, and Mind Cure, etc., and its potency is well known in the medical profession."

The potency of the "Universal law of suggestion" may be (apparently), well-known to the medical profession, but Dr. Williams knows not whereof he speaks, when he claims it has any place in, or is a part of, the teachings of Christian Science.

Hypnotism, Auto-suggestion, Mesmerism, Mental Science, Thought Transference, Human Will-power, Spiritualism, or their allies, which rely wholly or in part, on the influence of one human mind over or upon another, are repudiated and denounced in Christian Science teaching.

The above named cults or phenomena, indicate the presence in space, of multiple minds. Christian Science declares the Allness of one Mind. It is obvious, therefore, that their respective positions are diametrically opposite.

Christian Scientists have no quarrel with the medical fraternity. Physicians for the most part, are earnest, self-sacrificing individuals, whose efforts are extended toward the common good of their fellow men. Since the days of Hippocrates (460 B. C.), they have studied and experimented with tireless energy, in search of a panacea for all the ills which human flesh is heir to.

Many of them now recognize the fact, that Christian Science offers demonstrable proof of a power to heal, which cannot be found in the entire field of Materia Medica, nor is it related in any way to Hypnotism or its kindred.

*Note. The writer does not seek any personal notoriety because of his defense of the cause of Christian Science. If any of my brother dentists manifests interest enough in this article to inquire concerning the author of the same, the editor of the Digest is at perfect liberty to give name and address.

CORRESPONDENCE

Sept. 22nd, 1914.

DR. GEORGE WOOD CLAPP,
New York City.

DEAR DOCTOR:

I have been doing a little charity and educational work here lately that is causing some unfavorable comment among the local fellows who seem to think that it is unethical.

Statistics show that only nine per cent. of the American people regularly seek the services of a dentist, while something like ninety per cent. are in need of dental work. Now my idea is to educate the parents of my clientele as to the importance of having their children's teeth looked after, particularly the six year molar, and to give the parents an oral hygiene talk and to impress upon them the evil effects upon the health of the child through negligence of the temporary teeth. Since I have been handling this child's free clinic I am amazed at the number of badly broken down six year molars through the ignorance of the parents, just because they "thought it would come out." If I can do no more than save these molars for the little folks and possibly some deformed jaws and misfit faces, I will feel greatly repaid for the time I am giving to them and the efforts I am spending in this direction.

As a result of this work I am doing for the "kids" of this community, I have been expelled from the local dental society for "unethical advertising" in the local paper. I have invited my fellow practitioners to join me in this activity. They have also served notice that they are going to consider my expulsion from the district Society.

I am inclosing a clipping which I carry in the local paper for your judgment as to the ethics of it.

FREE DENTAL CLINIC

For children under 12 years, first and third
Saturdays of each month, from 8 a. m. to 12
m. Parents must accompany children.

DR. LEACH.

You may print in the DIGEST the above over my name, but most of all I want your opinion of the ethics of it.

Most sincerely yours,

T. A. LEACH.

Emporia, Kansas.

September 29, 1914.

DR. T. A. LEACH,
Emporia, Kansas.

DEAR DOCTOR:

I am in receipt of your favor of the 22nd inst., and the clipping enclosed, from your local paper, showing that you are conducting a free clinic for children on the first and third Saturdays of each month from 8 a. m. to 12m. provided parents accompany them.

You state that as a reward for this work you have been expelled from the local dental society for unethical advertising and that your expulsion from the district society is to be considered.

You ask my opinion of the ethics of it.

It is impossible for anybody at this distance and unfamiliar with all the circumstances to give an opinion which would cover the whole matter satisfactorily. It is very probable also that it would be equally impossible for anybody who was present and who knew all the circumstances, because there must be something of good and something of evil in the situation.

You will undoubtedly do a great deal of good to the public if you conduct this enterprise in just the right way. If the clinic includes service other than advice, I think it should be limited to children certified by the school authorities as unable to pay for such work.

You state that you have invited the other dentists in the community to join you in the activity, but that they have declined. This may have been from some misunderstanding on their part, or from the manner in which they were invited, or from something in the conduct of the enterprise which could not meet with their approval. It hardly seems possible that if the enterprise were to be conducted in such way as to benefit the public without seeking to attract special attention to any dentist, that they would decline, since activities of this sort are very common in certain places. I understand there are quite a number of cities where the dentists have agreed that the school authorities may refer any poor child, needing dental service, to any dentist in town, leaving a child to take its choice, with the understanding that the service will be performed free, as far as is required to relieve pain or preserve the child from serious damage. I am sorry I have no record of such communities and am unable to think of the name of any at present.

If I were doing what you are, and felt that I was doing it in a broad-minded, public-spirited manner, and that I was conferring benefit upon my community, I should go right straight ahead with it, though I were expelled from all the dental societies in the land. If, on the other hand, upon examination, I found that there were certain elements which could

be adjusted so as to prevent friction with my fellow practitioners and to increase the scope of the service to the community, I should try to adjust them and to work in harmony with my fellow practitioners.

In other words, if you are seeking to unselfishly serve the community, serve in the broadest spirit you are capable of and stick to it.

If you are seeking to advertise yourself to the community under the guise of a form of service, consider very carefully whether the gain is equal to the loss.

Yours very truly,
GEORGE WOOD CLAPP.

September 5, 1914.

DEAR DR. CLAPP:

Will you kindly give me the best after treatment known to the dental profession in controlling pain after tooth extraction?

(a) When pain is centralized in the socket from which tooth was taken.

(b) When pain is centralized in ganglia along the trigeminal nerve.

I refer more particularly to pain following extraction when cocaine is used as a local anesthetic.

Kindly let me have a word from you at your earliest convenience.

Yours fraternally,
G. C. S.

DR. G. C. S.—

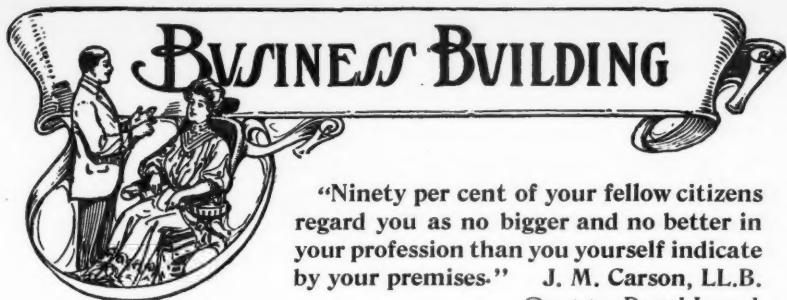
MY DEAR DOCTOR: Your letter of the 5th instant brings up the subject on which my old preceptor gave me a most excellent bit of advice.

When the pain is centralized in the socket from which the tooth was taken, instant relief can sometimes be obtained by forming a cone of cotton to a little less than will fill the socket, dipping the entire cone of cotton and the tip in carbolic acid and pushing it well down into the socket.

When pain is centralized in the ganglia, along the fifth nerve, I should be inclined to use aspirin, using five grains once every two hours; but in such cases I should be extremely careful to consult the family physician and make sure of his cooperation. This is often advantageous in counteracting some condition of which you may not be aware, and also in preventing any adverse criticisms in case the treatment should not be successful.

I will publish your letter and this answer, and you may receive more valuable hints from readers.

Yours very truly,
GEORGE WOOD CLAPP.



"Ninety per cent of your fellow citizens regard you as no bigger and no better in your profession than you yourself indicate by your premises." J. M. Carson, LL.B.

—*Dominion Dental Journal.*

THE RELATION OF SALESMANSHIP TO INCOME

By A. S. CARMAN, NEW YORK CITY

One of the most unethical things a dental magazine can do, according to some ways of thinking, is to let a dental salesman speak in the sacred precincts of the pages of a dental magazine.

Yet I am convinced that if we could know ourselves as the salesmen know us, and could see our opportunities and possibilities, as they see them, it would be the beginning of the longest step forward in our individual histories.

I know Mr. Carman personally. He has visited many thousands of dentists in many parts of the country. He has learned the secrets of many successes and failures. And he has here put his finger on two very important causes of failure—lack of confidence and patient, intelligent explanations as part of selling good service.—EDITOR.

It is unfortunate that so few dentists realize that skill plays a minor part in the development of a lucrative practice, as the size of their income depends largely upon their ability as salesman, and yet they have not endeavored to become efficient in that respect. Those who have, are successful, and many of them are recognized as the leaders of the profession.

Have you ever given any thought why Dr. Success attained the prominent position he occupies?

Is his skill so much greater than that of many lesser lights?

Assuredly it is not.

What then has caused Dr. Success, to gain such a great reputation?

The answer is "Salesmanship." Principally his ability to create in the minds of the people with whom he comes in contract, the impression, that he excels all others in his special field of endeavor.

Some of the most skillful workers are located in small towns and cities and have never been heard of outside of their own communities. In all probability the people who need their services so badly will never know they exist; whereas these very men might have had their names wafted to the four corners of the earth had they only applied modern selling methods, as some of their brothers have done.

You have heard of Dr. Success of New York, and Dr. Success of Chicago. Perhaps you know them personally or by reputation. You hear them spoken of or quoted as authorities at your conventions and society gatherings, and in all probability you have frequently mentioned them as great men of the profession. Did you ever see any of their work? If you have seen specimens that Dr. Success has exhibited and considered them perfection personified, how are you to know, but that some one they employ who is never seen, never mentioned, has made the beautiful piece of work Dr. Success has displayed as an example of his craftsmanship, and then taken all the credit?

Such things occur every day, and while these men are held up as model examples of the profession their success is largely due to cultivated diplomatic selling talks both to their patients, the people they meet and you; even *you*, though you may not have realized it.

Rarely have you attended a convention that you have not had the pleasure of listening to a Dr. Success expound his methods of treating root canals, gingivitis or pyorrhea; or how he constructs bridges, orthodontia appliances, artificial dentures, etc., etc., and the unflinching results that always attend his original methods. Surely you do not think Dr. Success, does this for his health or the pleasure it brings him. No indeed, nothing so philanthropic. His principal object is to impress upon you the lasting thought of his extraordinary ability, so that when a case which has the appearance of being extremely difficult presents itself, and the thought of attempting it sends cold chills down your spinal column, the image of Dr. Success may spring up before your vision to blind you with his greatness and your insignificance and you will ("providing of course your patient has the necessary financial means"), advise him to visit a specialist. With faith in your wisdom, the patient is satisfied that you must be convinced that his case is desperate, and requests your advice. You recommend Dr. Success as the man in your estimation most capable of performing the operation. Arrangements made, the unfortunate is sent away, and you have lost an opportunity.

Now why wouldn't it be a good plan for you to work along the lines Dr. Success has adopted? It pays him and it pays every man to get behind himself with a good strong healthy enthusiastic push. Load up with confidence. It's a great business-getting tonic. Take advantage of every available opportunity to shove yourself ahead; operate not less with your hands but more with brains and mouth. If you do, you will be able to declare a dividend on your mental, physical, and oral investment which will be enormous, and providing you deliver the goods your bank account will display pleasing symptoms.

You are not practising dentistry for fun. If you had been looking

for glory you could have joined the army or gone on the stage. So when you hear Dr. Success preaching about "How I Love My Profession" and see him throw up his hands in horror when the commercial skeleton is dragged out for discussion, satisfy your conscience in the knowledge that his actions are solely for the purpose of discouraging ambitious aspirants to his field of revenue. An investigation of his bank account would disprove his assertions of working for love.

You are in duty bound to provide a comfortable living for yourself and family, an education for your children, and to take care of your financial obligations, at the same time bearing in mind the fact that you are not getting any younger and the time is coming when you will not be able to slave over the chair as you may be doing now. You will eventually have to give in to the incompetency of old age. When that day comes will you be prepared for it at your present rate of earning? Make sure that your last days will not have to be spent in a poor house by **"increasing your fees"** and the only way to do that is to develop your latent selling ability.

Some of you will immediately retort "salesmanship is a natural talent" a thing which cannot be acquired and that unless one is gifted, it is foolish to attempt it. Yet since the world began it is impossible to point to a solitary calling which has not had to do with selling in some degrees. As an example of this, take lawyers and ministers of the Gospel; they are salesmen of high order, selling mental pictures and according to their ability to create big thoughts, are their salaries or fees. Go to a church or a court where a highly paid minister or lawyer is speaking and listen and watch. It will not take you long to figure out why they are high-priced, why they are in demand, why people place their trust in them, and why they are willing to pay for such service. Then take stock of yourself and see if you measure up to the standard of requirements that you would demand in another, if placed in the position your patients occupy.

How many times have you told a prospective patient "that's my price; if you can have it done for less, that's the place to go," when you could just as well have had that work at your own fee if you had only taken time to explain why you were asking more for the price of work and shown him why it was to his advantage and benefit to pay the difference in price. Some of you may be fortunate in never coming in contact with a condition of that kind and even though you never do, a few high class demonstrating models of different kinds to be used for explanatory purposes, would make price-getting much easier, and patients much better satisfied.

Supposing you were a layman requiring a bridge and you went to a

dentist who took the trouble to explain the different kinds of work possible to have done, and the advantage of one over the other, and to make clear his meaning showed you a specimen bridge with tissue paper crowns poorly constructed and another with crowns having heavy cusps, teeth artistically arranged, and beautifully soldered. Which do you think you would take? Suppose again you were in need of a set of teeth. You knew Dr. A, made plates for \$5.00 but you had been in the habit of going to Dr. B. and you went to him and asked him what he would charge to make you a set and he flatly told you \$25.00. You might think a set of teeth merely a set of teeth and would decide to give Dr. A. a trial. Had Dr. B. shown you a set mounted on the old style plain line articulator made of cheap teeth that would not articulate and another mounted on an anatomical articulator with teeth of anatomical forms and explained how it was possible to thoroughly masticate and triturate your food with one and utterly impossible with the other, you would have understood why there was a difference in the prices of the two men and have been willing to pay it.

To the average person a plate is a plate, a crown is a crown, and a bridge is a bridge, just the same as "pigs is pigs." They know nothing whatever of the ideal, and unless you make it your business to educate them, the majority will never know there is a difference. It is for just that very reason that price is so often the chief consideration, and so much shopping is done with dentists. Get out of the habit of saying "my price is so and so," with an air of take it or leave it. Go into detail in an effort to convince them of the merit of the article you want to sell them and which you think they ought to have, just the same as you would expect an automobile salesman to do if you went out looking for a car. Do you think you would buy a machine if one of these salesmen uppishly said "the price of it is \$1,000.00" and didn't endeavor to bring out the advantageous features over others of the same or less money? Never. Then why should you expect a patient to pay you \$25.00 for a piece of work that they know they can have done for \$10.00, unless you show them?

Get some good book on salesmanship. Read it and apply the principles to your business.

Attend society meetings. Have yourself put on the programme for a paper or a clinic. Do everything you can to legitimately bring yourself to the attention of the public and profession. Be a big man among men instead of crawling in a hole and pulling the hole in after you. Never be satisfied. Keep your shoulder to the wheel and no man living will have anything on you if you make up your mind that he is not going to.

WHAT DO YOU CHARGE FOR —? WHY?*

BY FREDERICK CROSBY BRUSH, D.D.S., NEW YORK

Continued from October issue

DISCUSSION

DR. ABBOTT:

I do not want to make any criticism, Mr. President. I have listened with a great deal of pleasure to this paper, and I know it is going to amount to a great deal of money to me when I go home and capitalize those things. I have been coming to dental conventions for years, and I realize after hearing Dr. Brush or "Brother Bill," if we hear nothing else in coming down to this convention but what Brother Bill has told us, we are all more than repaid for coming here. It has opened my eyes, particularly on the subject of pyorrhea being a financial disease. I am one of the old residents now, and when I come to register and put down the year in which I graduated it brings it home to me.

* * * * *

DR. COYNE:

Mr. President and Gentlemen, I am an enthusiast on this subject, and I have been for five years. I have been called a radical in this building before now because I spoke of principles similar to those advocated by Dr. Brush, and they were not original because I got them right out of Brother Bill. If there is one name I want on my headstone more than another it is "Brother Bill," because he has done more for me than anyone else I have ever come in contact with. If that influence had not been carried out and the public served then his mission was in vain. but I believe the very fact that he has taken this up in a common sense way, and has had a heart to heart talk in the pages of that magazine has done more for the profession of dentistry, yes, more for the people that are served than all these long papers and discussions have done for twenty years. I am perfectly satisfied I am right and I have talked to men who have volunteered the same information. You people need not give me the haw-haw laugh, you all saw the thing. Hundreds of men never pretend to fill a root; I have seen dozens of them put a chunk of cotton down the pulp chamber, not a filling, never any attempt at preparation of the cavity, the thing was bigger on the inside than on the out, and the amalgam had tumbled out ten years ago. Hundreds of pulps are devitalized and left there. I say this in all sincerity because I am sorry it has happened — hundreds of pulps are devitalized and never taken out of the tooth. Never mind all this discussion about germinology, the fact remains that hundreds of pulps are never taken out, they are left in

*Read before the Ontario Dental Society, Toronto, February, 1914.

the teeth, and after a while there is trouble, and there are lumps hanging down the size of that glass sitting on the table. Why? Because those pulps were never taken out. Why? Because they couldn't get the money. They thought they couldn't. Of course they can get the money.

Brother Bill talks about a dollar fee for an amalgam filling. He is away off his trolley in Canada, because the average in the country and around Toronto is 75 cents; and you can't get a plumber to come into your house for 75 cents; you are worse than a plumber. You couldn't get a plumber to take off his hat to you. I say a man that puts in amalgam fillings for fifty or seventy-five cents is not a dentist or professional man, he isn't even a mechanic, he is a painter (Laughter). Here in the infirmary, we were not taught the idea of the professional fee. I claim a course of lectures on dental economics is as essential on a dental curriculum as any course. Mark you, I don't mean for the good of the dentist alone, but I say if this man or any other man gets up and talks this way, it is of no effect if we can't let the influence radiate to the public we serve. In talking of this thing of getting a better fee, don't stick your chest out and say you don't do it, because you all do it; the bailiff would be in in two weeks if you didn't do it. You can't put up a \$10 service for 50 cents. Show me a grocer that will do it. When they get together they agree. Let the dentists get together and let them all agree, and ten chances to one you will knock your brother dentist when you go home because he charges \$10 and you do it for \$5. Dr. Thomas spoke about not being able to get a man to give a clinic. He said I was one of only two that answered. I said, Look here, I don't know any more about dentistry than anybody else; what is the use of me giving a clinic? All I have got to say is turn your convention into a business meeting for three days, and it will do more for the public and for dentistry and for the dentist than you will do with your conventions for ten years to come. Dr. Thomas saw the point and wrote back. I am tickled to death that this man (Dr. Brush) is here to-night. Here is a little criticism on somebody. I want to congratulate the man who thought of bringing Brother Bill here, he showed some sense; he has done more for this convention and for the public and more than any other man can do with all the technical papers for twenty years to come. What is the use of bringing Dr. Hillyer here and all these other big guns till you know how to do your work, or until you do your best with what you do know? You don't do it now as well as you know how when you are plugging cotton down into pulp chambers.

You all see it. I have seen it lots of times. That is only part of it. You go to fill a tooth, and you get a dollar for amalgam, and throw in a

treatment. Any mechanic can do that, but from what you have learned you are supposed to know how to treat. Is there any charge for that beyond throwing in your filling? I once put on a crown, and the man said that is a h — of a charge for a crown. I said, I will give you the crown for nothing; if you can put it on, you can have it for nothing. He said, I can't put it on. I said, That is what my fee is for. That is the point (Applause). I am not a knocker. I am simply here because I hope every last man will go home after this convention and get down to brass tacks and practice Brother Bill's principles. You may differ on the matter of detail, you may not like his homely phraseology and manner of putting it, you may not like a few of those rough points, but mark you, if you follow Brother Bill you will forget all about the rough points, and it will be just as smooth as a feather bed. I am no sponsor for him; I never saw him in my life before and he didn't know what I was going to say. If you are going to take pulps out of molar teeth, and if you are going to do it the way you are taught in college to do it, and common sense will tell you how to do it, you are not going to do it for \$2, or \$3, or \$3.50. I did it one time for \$3.50, but I didn't know any better, and when I got nearly done, I simply made the remark with an apologetic air, I haven't made much out of that; and my patient said, I was just figuring you are not getting 50 cents an hour for your time, and I made up my mind there was to be no more 50 cents an hour stunts for me or anybody else. The man saw the point. He understood plainly he couldn't get a plumber to come in for less than 65 cents, and I was working for 40 cents. The next time, the chances are, he would get a plumber instead of me (Laughter).

I never got a chance to say these things before. Ten years ago if a man had got up in a dental convention and said these things that window over there wouldn't have been big enough; ten years ago a man who said these things would have been branded as a charlatan, and I claim there are more charlatans made by the shunting of business principles — what do they do in Osgoode Hall? They don't need it down there because business is business from start to finish. A dentist knows no more about business when he finishes than when he starts; all he knows is that he isn't worth anything. There is a whole bunch of charlatans right here in this city and province, because you are all the same if you are going to put in amalgam fillings for a dollar, and crowns for \$5, and plates for \$10. They can't make them to save their souls in less than eight or ten hours, and you can't make a set of teeth for \$10. The plumbers have been beaten again. Lots of people have to make them ten times. If dentists will simply pull their chests in and not be so cocky on their ethics, they will have more, better and sounder ethics. If you

are putting in this kind of filling, and not attending to things because you can't get the money, you are not ethical and you are not just to yourself; if you are not just to yourself, your family is going to suffer, and you are ten times more ethical if you will do a thing right, and charge what is right. Let us go home on Thursday morning, and let every man try to come back to this convention a year from now, and see if he doesn't know something more than he does now (Applause).

DR. BRUSH:

I didn't know that Brother Bill had any relatives up here; I think I must have run up against our long lost cousin Al.

DR. CLARKSON:

When you were here before, you spoke on the relation of philanthropy to dentistry, and I think if you would say some words on that it would be very interesting.

DR. BRUSH:

I don't know what I said, but if it was anything that I should have been sorry for, and wasn't, I will apologize now. That was two years ago. I don't remember just what we were talking about. If you put a direct question to me, perhaps it will give me a clue.

DR. CLARKSON:

A poor patient comes in your office, do you believe in reducing your fee to meet the needs of particular cases — those who cannot pay the regular fee that you charge?

DR. BRUSH:

I am going to turn your question a little before I answer it. At one meeting a man put the question in a bolder way than that. He said: Do you believe it is right to charge a rich man more than you do a poor man? Do you think that is really fair? And I asked him if he thought it was really fair to charge a rich man as little as you would a poor man? It is all in the way you look at it. The poor, we always have with us, and every man should be fair and just. If patients that came to you when you were a young man, and sent others when you needed them, and have been faithful and grateful to you all these years, should happen to be in a position where they cannot pay your advanced fee, it would be but gratitude on your part to continue them at the old fee, just as long as you can. But, that does not alter the business rule one bit; you are at perfect liberty, if your fee is \$5 an hour, to take \$10 if you can get it; you are also at liberty, if the case warrants it in your estimation, to do the work for \$3, and charge the other \$2 up to profit and loss, or you can work for nothing and call it charity if you like. That all depends upon the man and the way he looks at it, but it does not alter the rule one bit, and because you happen to have a few patients in your practice that

could only afford to pay you two or three dollars an hour is no reason why you should establish that as a regular fee.

The trouble with the dentists has been that they have been extending charity — but in the wrong direction; they have not been working for poor people at a reasonable fee, but have been working for well-to-do people who did not pay their bills; they do not collect their fees and that is where they give their charity, and that to my mind is misdirected. I am perfectly willing any time, if it is within my power, to be charitable to anybody that needs it, but I will not be to dead beats — would you?

VOICES: No, no.

DR. SPARKS:

When I saw in the programme Brother Bill was going to be here, I thought it would be worth while to spend the whole time at the convention to be here to-night. When Dr. Coyne was speaking, he reminded me of when we were in our college days, and again at our post-graduate course two years ago. Dr. Coyne was speaking in the same strain as now. One of the best eye openers I got in the way of fees was in camp last summer in Newark, one of the men present was remarking about what he would get for certain work, and why, and the fees he spoke of getting there — I thought if I couldn't get as good fees for the same work, it was up to me.

DR. BRUSH:

I think this putting yourself on a salary is the most important thing in the matter of business that I can possibly suggest to you. As I said in my paper, it will regulate many things in your business and personal affairs, but the point I think the Doctor is aiming at is how to know how much salary you are entitled to draw. That is a hard thing to say. A man is pretty apt to overestimate himself when he is estimating what his own work is worth, but remember that little thing I said, the man who deceives himself is the most deceived of all. Don't deceive yourself as to your value in your own practice. The men in the smaller towns might consider the social position they occupy; that is, the class of people that they mingle with socially, be it the clerk in the store, the bank clerk, the town attorney, the physician, or whoever it may be, and get a line on what their income is, and if they have to maintain an equal social position, then they will need to have the same income. In the average town I should say that the general income of the salaried class might run \$25 or \$30 a week, which would mean \$1,500 a year. If that is the case, see how that \$25 or \$30 a week compares with what you *think* you have been making in your practice, and then see how it compares with what is left after you book all your cash receipts for the year, and all the business expenses as you have learned to figure them out. Or, if you

find, looking at it from another standpoint, that after figuring up the cost (and all the cost) of running your practice, that for an average number of years you have been receiving net an income more than that, take that as an average and use it as the basis for a salary, and then I would recommend that by all means you draw that salary weekly. It will be hard at first, the way most dentists have been handling their finances, but you should draw that salary weekly just the same as you pay your office assistant and other help about your place. Put yourself in relation to your practice as that of a manager and draw a salary and keep your personal accounts and affairs absolutely separate from anything that has to do with the conduct of your business. It will regulate your personal expense. It will leave money in the business fund to meet your depot bills and other things promptly. If at any time it comes Saturday night, and the bank balance is a bit low, and there is not enough to meet your salary, it will stimulate you into studying the reason why, and when you begin to do that, you will begin then to get a real inkling into the business side of dentistry.

MEMBER:

Do you usually ask for a retaining fee from any stranger who comes into your office?

DR. BRUSH:

Yes, surely. Why not? As to the question of giving an estimate, a good many men have been giving estimates in this way: "I think your work will amount to from \$20 to \$25." Isn't that the usual way? Don't give them two figures. Patients always remember the low one and forget the high one. Never mention but one figure. If a patient asks for an estimate, I see no objection to giving it. I think it is only fair to a patient. I know when you went to buy your automobile, you asked the price of it, and you had a right to know. I don't think it is fair to let a stranger come into your office, knowing nothing of your scale of fees, and run up a bill which he may not be able to meet. It is not fair to him and puts you in an uncomfortable position. You have done something that you can't get paid for. Sometimes a patient may say: "I want to know definitely." "Very well," I say; "I will tell you, but before I tell you the definite figure, I am going to tell you how I arrive at it. If I am to give you a definite figure for your work, that figure has to be large enough to protect me against any emergency that may arise in your mouth, or with your teeth; anything I can conceive of I have to protect myself against. Therefore I have to give you a maximum estimate, but bear in mind if you agree to that fee, that is what the bill will be, even though the emergencies do not arise. You must take that chance, but if you have confidence enough in me, and trust me enough to be willing to

put your teeth and your health in my hands and trust me to give them proper care, can't you trust me to render a proper bill for it? Do you think it is necessary to pin me down beforehand for fear I will take advantage of you? If I am going to take advantage of you, do you think it would be only on the bill? I would take advantage of you in your mouth, and you would never know it."

With reference to putting patients on the black list, the plan I suggested to the men in Hamilton was for all to employ the same collector; agree to put your accounts that have stood for a certain length of time or that you have any question about all in the hands of one collector, and give him all the information you can.

I think a scheme of that kind could be worked out to the mutual advantage of every man in the town if they get together. They will never get anywhere until they do get together.

DR. COYNE:

I would like to move a hearty vote of thanks to Dr. Brush; he has given an excellent paper, and we have profited very much by it and by his general talk. He can put his shoes in my trunk any time he likes and board with me for a whole year, and I will consider I owe him a whole lot still. If all the dentists in Ontario were relatives of Brother Bill, it would be better for them.

On the motion being seconded by Dr. Price, the President put the same, and on a vote having been taken, it was carried with applause.

THE PRESIDENT:

Dr. Brush, it affords me much pleasure to present you with this vote of thanks of the society. I certainly have appreciated your work with us to-night, and the way you have taken up the matter with us.

DR. BRUSH:

Gentlemen, I appreciate your cordial reception and the way you have sat out my long talk. I trust that a whole evening devoted to one subject has not tired you too much.—*Dominion Dental Journal*.

MINUTE DETAILS

A young man who needed false teeth wrote to a dentist ordering a set as follows:

"My mouth is three inches acrost, five-eighths inches threw the jaw. Some hummocky on the edge. Shaped like a hoss-shew, toe forward. If you want me to be more particular, I shall have to come thar."

—*The Texas Dental Journal*.



MY DEAR NEPHEW:

I've just finished reading your reply to my refusal to lend you \$500 to meet current expenses.

You admit much that I said about your not knowing how to handle judiciously the money you earn by practice is true. You say that the trouble results from unwise financial management at home. I am sure you are not trying to throw the blame on your wife. But if you are, I'm going to come back at you by saying that I believe it to be largely your own fault.

I am well aware that there are some women no one can do anything with. They will have the things their neighbors have whether the income justifies them or not. They will bake out and throw out and wear out more than a man can earn. But when you stopped at our house on your wedding trip, your wife and Mrs. Bill had a number of heart to heart talks. And Mrs. Bill says your wife is kind and sensible. I showed her your letter and she said "Nephew may be right but it isn't his wife's fault. Why doesn't he help her?" Now when Mrs. Bill says any one is all right, that's enough for me. Some men and more women fool me but I've never known any one to fool Mrs. Bill. So I'm going right back at you on your own score.

If I remember rightly your wife came from a family in very modest circumstances, just the circumstances you were in when you married her. She was an only daughter, of a rather young mother who took full charge of the house and so daughter didn't learn much about housekeeping and especially about the economies that can and must be effected in the buying end of the matrimonial firm.

From what you write me, money came in from your practice more freely than it had ever come to her before. You didn't make her any explanations about its use. You established accounts at a number of stores and when she wanted anything, she had it charged. Or at other stores she had articles sent to the house or office and you paid for them. I'm taking a page out of my own life when I say that you probably didn't

tell her how much a month could be spared for the house bills. Maybe you didn't know yourself. And I'm sure as can be that you never gave her the real money to work with.

How do I know? Because I did that way when we were married. As our income increased, we simply opened more accounts at more stores. And I couldn't get a dollar ahead because it took all I earned to pay the bills.

Finally, I had a session with myself. And the reform began inside me. I made up my mind to give Mrs. Bill enough money to run the house on



"Your wife and Mrs. Bill had a number of heart to heart talks"

and a little over. But how much? I didn't know. Neither did she. So we sat down to the books of the practice and *found out what we earned and what was left after the office bills were paid*. Finally we agreed on a sum and the exact items she was to pay out of the sum and wrote them down to prevent confusion and disagreement. That naturally led to a discussion of the economic policy of the household. And when it was over we had learned more about the financial side of matrimony than we ever knew before.

Well the effect was funny and pleasing. That very next morning I heard Mrs. Bill call up the grocery where we bought most of our supplies. She had been in the habit of ordering what she wanted and having it sent up without asking the price. The conversation this morning was somewhat as follows:

Have you any lettuce?

(Yes.)

How much is it?

(Fifteen cents a head. It's from the South.)

Too dear, don't want it.

Have you any cucumbers?

(Yes, at ten cents each, Southern too.)

Can't afford them. Send up one bag of flour, a yeast cake, some bluing, and soap.



"So we sat down to the books of practice and found out what we earned and what was left after the office bills were paid"

Seeing me laugh she said "I wanted cucumber and lettuce salad but the 'makings' are too expensive. I'll fix up something else." And she did.

Of course she had her troubles and got into debt once or twice. But she's got out again and each time was increasingly careful. That was some years ago. Now she has her own bank account. I don't know now what it costs to run the house, but she knows to a dollar. And it is well and economically run.

There is a sentence in the Bible about the blind leading the blind and both falling into the ditch. As nearly as I can make out, that's the condition at your home. You certainly have not given any evidence of unusual financial wisdom. And I don't believe you've ever studied the subject with your wife.

When you come to look over the conduct of most men in this particular, you'll see that a lot of men who love their families, never give their wives a decent chance to be real helpmeets. They provide plenty of charge accounts, but rarely give the wives real money. They don't tell how much it costs to live or what they can afford to spend.

That might be a way to treat a responsible subordinate, though it would be a mighty poor way at that. But your wife isn't a subordinate. She's an equal partner. And her task is quite as important as yours. You bring in the money. She supervises the outgo of most of it. And it's her task to see that not quite all of it gets away.

If I were treated as some otherwise good men treat their wives on the subject of money, I'd hate the man who treated me so. And I'd make life one merry round of trouble for him. But good women don't. They do better than I could.

You're young. You've shown common sense in other lines. And it's up to you to go home and study the subject frankly and freely with your wife. Mrs. Bill says she has as much sense as you have, and will be just as anxious to do wisely. And pulling together you'll get out of the present hole and will avoid similar holes in the future.

No, I'm not going to lend you the \$500. That would merely prolong the agony, even if you repaid it. The training you'll both get in winning out will be worth far more to you than the money you'll save.

And let me give you a few hints. When you settle how much your wife shall have to run the house monthly, take it to her in cash. Somehow it looks bigger in real money. And it hurts worse to see the pile of bills steadily dwindling than merely to sign checks that don't in the least resemble money.

Next. Give her a little more each month than the house bills call for. If you allow \$100 a month for the house give her \$110, so she'll always have money in her purse. You know how much better you feel when you're flush than when you're "broke." She feels just the same way. She'll be happier with money than without.

Oh yes, women are much better off now than they were years ago but that needn't worry you any. You get more from a woman now. She's an equal partner now and in most cases when she's properly treated, does her full part of the work. And between the high cost of living and the cost of high living a partner of this sort is a treasure worth cultivating.

Bill



PRACTICAL HINTS

[This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions, and Answers should be sent direct to him.]*

FITTING AND CEMENTING SMALL INLAYS.—Small inlays may be easily carried to cavities and inserted for fitting and final cementing by sticking same to a suitable burnisher or other instrument with a bit of sticky wax. —V. C. SMEDLEY, D. D. S., DENVER, COLO.

TO KEEP GUTTA-PERCHA POINTS STERILE.—Use three clear glass dental medicine bottles filled with alcohol, and place the different sized points in them. In this way you always have sterile points of the various sizes ready for immediate use. —FLOYD E. CLINITE, D. D. S., REDFIELD, S. DAK.

CROWN FOR POSTERIOR SHORT-BITE CASES.—In cases where the posterior teeth are broken down to the gingival border, with occlusion close, a crown may be constructed, as follows:

Prepare root and adapt band in usual manner. Open canal and fit post as for dowel crown. Notch occlusal end of post. Place post and contoured band in position. Force inlay wax into band, attaching post to wax. Carve cusps to fit occlusion. Remove wax with band and post avoiding distortion, invest in inlay flask and cast. —C. A. HALLE, D. D. S., CHICAGO, *The Dental Review*.

METHOD FOR MOUNTING SMALL CERVICAL INLAYS.—The adoption of the gold inlay for the filling of small cervical cavities relieves the unpleasant and sometimes painful adjustment of the rubber dam, and the convenient and proper seating of the inlay may be enhanced by the use of the following method.

Cavity is prepared as usual. Sprue wire about the size of a common pin is heated and attached to wax pattern while in the cavity and wax withdrawn with this sprue. After casting, cut button off leaving an extension on inlay which is to be used as a handle. With knife-edged stone grind this handle close to the inlay nearly in two, or so that it will bend easily. By the use of this handle the inlay may be easily mounted. After cement has hardened break off handle and polish inlay. —G. M. FOSTER, D. D. S., BEACH, N. D., *The Dental Review*.

*In order to make this department as live, entertaining and helpful as possible, questions and answers, as well as hints of a practical nature, are solicited.

GUTTA-PERCHA FOR DURABLE TEMPORARY FILLINGS.—A temporary gutta-percha seal may be made to last longer by filling the last part of the cavity with base-plate rubber. Cavities which are too sensitive to tolerate the greater heat necessary to make base-plate rubber plastic may be filled in this way, and when they do not receive the direct force of mastication, these fillings give better service than most other temporary work.—H. C. FITZHARDINGE, *Commonwealth Dental Review* (*The Dental Cosmos*).

PROTECTION OF BRIDGE ABUTMENTS.—It is very necessary after the abutments are prepared to protect them from thermal changes. My method is to use the copper bands furnished with the bridge contour crown press. Select the proper size, festoon to the gum, cut off to the proper length and then cement to place with some good temporary cement or use gutta-percha. I use cement in some cases but gutta-percha has the preference.—R. E. CHANNING, FITCHBURG, MASS.

POLISHING ARTIFICIAL VULCANITE DENTURES. After having filed and scraped a vulcanite plate, instead of using any sandpaper, a mixture of one part of emery powder and three parts of powdered pumice is employed for finishing and polishing, affording considerable economy in time.—*Le Laboratoire et le Progrès Dentaire* (*The Dental Cosmos*).

TO KEEP MERCURY PURE AND BRIGHT.—If preserved in a glass bottle under alcohol, mercury remains permanently pure and bright. If the bottle is reversed, only mercury flows out, the alcohol remaining above the heavier metal.—*Der Dental-Markt* (*The Dental Cosmos*).

LOCATING ROOT CANALS.—A very useful method for locating difficult root-canals is as follows: After the cavity has been properly excavated, a pellet of cotton is dipped into a 40 or 50 per cent. solution of sulphuric acid and placed into the pulp chamber for one half to one minute. The rubber dam in this case should be applied. The pellet is then removed and the acid is neutralized by the application of sodium bicarbonate. The cavity is then syringed with water and dried. Another pellet of cotton is dipped into tincture of iodine and inserted into the cavity. This pellet is also allowed to remain there for from one half to one minute. Upon removing the pellet, the appearance of black spots will indicate the orifices of the root-canals. The purpose of the sulphuric acid is to dissolve all débris and disintegrated matter, clearing the orifices, while the tincture of iodine stains the orifices black, thus rendering them readily noticeable.—J. A. KLEIN, *The Acorn* (*The Dental Register*).

ROOT CANAL INSTRUMENTS.—Instruments in root canal work require more careful attention than any other instruments. If they are intended to cut see that they are kept sharpened. If a spiral drill becomes weakened by turning on itself discard it.—ELMER S. BEST, D. D. S., MINNEAPOLIS, MINN., *The Dental Review*.

QUESTIONS AND ANSWERS

Question. Please give me the best recipe for making sticky wax.—E. G.

Answer. Take three parts (by weight) of gum damar and one part of beeswax (preferably white) and melt together. Considerable heat is required.—V. C. SMEDLEY, D. D. S., DENVER, COLO.

Editor PRACTICAL HINTS:

Question. In the August number of the DIGEST under Practical Hints, in answering M. J. R., you have mentioned cocaine and pressure as one of your methods for devitalization.

In my eight years of practice I have tried this method many times, but I have always made a failure, i. e., I have not received satisfactory results, though I have read many papers on the subject. My experience is that it is painful to expose the pulp and unless I expose the pulp chamber I have not been able to penetrate the cocaine into the pulp. I also find it painful to put any pressure on a live pulp—and you have to put pressure to make the cocaine penetrate into it—and in that case people generally think they are being tortured unnecessarily. I do admit that once the pulp is anesthetized it will come out painlessly, but to me, the whole process seems painful. A few lines from you as to your method will be highly appreciated.—B. H. T., Carl Junction, Mo.

Answer. I usually use the Wilcox-Jewitt high-pressure syringe to force cocaine solution, 2 per cent. into sensitive dentine; and except in cases of much pulp calcification have no great difficulty in desensitizing a tooth long before the pulp is penetrated. The same result may be obtained a little less readily by placing a tiny pellet of cotton moistened with saturated solution of cocaine in the bottom of your bur pit, covering same with small piece of unvulcanized rubber and pressing upon same with blunt pointed instrument in firm steady hand. The pressure should be directed in as nearly as possible a straight line toward the pulp and preferably at the neck of the tooth. Several applications, cutting a little deeper after each, are usually required.

I believe that Buckley's desensitizing paste is going to prove a great help in those cases for which we can spare an extra sitting and where the pressure seems to cause distress.—V. C. SMEDLEY, D. D. S., DENVER, COLO.

A Prayer of the Peoples

(On the Day of the President's Call to Prayer.)

God of us, who kill our kind!
Master of this blood-tracked Mind
Which from wolf and Caliban
Staggers toward the star of Man—
Now, on Thy cathedral stair,
God, we cry to Thee in prayer!

Where our stifled anguish bleeds
Strangling through Thine organ reeds,
Where our voiceless songs suspire
From the corpses in Thy choir—
Through Thy charred and shattered have,
God, we cry on Thee to save!

Save us from our tribal gods!
From the racial powers, whose rods—
Wreathed with stinging serpents—stir
Odin and old Jupiter
From their ancient hells of hate
To invade Thy dawning state.

Save us from their curse of kings!
Free our souls' imaginings
From the feudal dreams of war;
Yea, God, let us nevermore
Make, with slaves' idolatry,
Kaiser, czar, or king of *Thee*!

We who, craven in our prayer,
Would lay off on Thee our care—
Lay instead on *us* Thy load;
On our minds Thy spirit's goad,
On our laggard wills Thy whips
And Thy passion on our lips!

Fill us with the reasoned faith
That the prophet lies, who saith
All this web of destiny,
Torn and tangled, cannot be
Newly wove and redesigned
By the Godward human mind.

Teach us, so, no more to call
Guidance supernatural
To our help, but—heart and will—
Know ourselves responsible
For our world of wasted good
And our blinded brotherhood.

Lord, our God! to whom, from clay,
Blood and mire, Thy peoples pray—
Not from Thy cathedral's stair
Thou hearest:—Thou criest *through* our prayer
For our prayer is but the gate:
We, who pray, ourselves are fate.

Oct. 4, 1914. PERCY MACKAYE.—*New York Times*.



AMERICA AND THE ISSUES OF EUROPEAN WAR

BY CHARLES W. ELIOT M.D., L.L.D.

President Emeritus of Harvard

This magazine is absolutely neutral as between races of men and their beliefs or actions.

The following letter by Dr. Eliot is worthy the attention of every thinking man, and I am glad to republish it from the *New York Times*, not in partisanship but to help all of us to frame more clearly thoughts which may be in our minds.—EDITOR.

Editor of the New York Times:

The numerous pamphlets which German writers are now distributing in the United States, and the many letters about the European war which Americans are now receiving from German and German-American friends, are convincing thoughtful people in this country that American public opinion has some weight with the German Government and people, or, at least, some interest for them; but that the reasons which determine American sympathy with the Allies, rather than with Germany and Austria-Hungary, are not understood in Germany and are not always appreciated by persons of German birth who have lived long in the United States.

It would be a serious mistake to suppose that Americans feel any hostility or jealousy toward Germany, or fail to recognize the immense obligations under which she has placed all the rest of the world, although they now feel that the German Nation has been going wrong in theoretical and practical politics for more than a hundred years, and is to-day reaping the consequences of her own wrong-thinking and wrong-doing.

There are many important matters concerning which American sympathy is strongly with Germany: (1) The unification of Germany, which Bismarck and his co-workers accomplished, naturally commended itself to Americans, whose own country is a firm federation of many more or less different States, containing more or less different peoples. While most Americans did not approve Bismarck's methods and means, they cordially approved his accomplishment of German unification. (2) Americans have felt unqualified admiration for the commercial and financial growth of Germany during the past forty years, believing it to be primarily the fruit of well-directed industry and enterprise. (3) All educated Americans feel strong gratitude to the German Nation for its extraordinary

achievements in letters, science, and education within the last hundred years. Jealousy of Germany in these matters is absolutely foreign to American thought, and that any external power or influence should undertake to restrict or impair German progress in these respects would seem to all Americans intolerable, and indeed, incredible. (4) All Americans who have had any experience in governmental or educational administration recognize the fact that German administration—both in peace and in war—is the most efficient in the world; and for that efficiency they feel nothing but respect and admiration, unless the efficiency requires an inexpedient suppression or restriction of individual liberty. (5) Americans sympathize with a unanimous popular sentiment in favor of a war which the people believe to be essential to the greatness, and even the safety, of their country—a sentiment which prompts to family and property sacrifices very distressing at the moment, and irremediable in the future; and they believe that the German people to-day are inspired by just such an overwhelming sentiment.

WHY OPINION FAVORS THE ALLIES

How is it, then, that, with all these strong American feelings tending to make them sympathize with the German people in good times or bad, in peace or in war, the whole weight of American opinion is on the side of the Allies in the present war? The reasons are to be found, of course, in the political and social history of the American people, and in its governmental philosophy and practice to-day. These reasons have come out of the past, and are entrenched in all the present ideals and practices of the American Commonwealth. They inevitably lead Americans to object strongly and irrevocably to certain German national practices of great moment, practices which are outgrowths of Prussian theories, and experiences that have come to prevail in Germany during the past hundred years. In the hope that American public opinion about the European war may be a little better understood abroad it seems worth while to enumerate those German practices which do not conform to American standards in the conduct of public affairs:

(a) Americans object to the committal of a nation to grave measures of foreign policy by a permanent Executive—Czar, Kaiser, or King—advised in secret by professional diplomatists who consider themselves the personal representatives of their respective sovereigns. The American people have no permanent Executive, and the profession of diplomacy hardly exists among them. In the conduct of their national affairs they utterly distrust secrecy, and are accustomed to demand and secure the utmost publicity.

(b) They object to placing in any ruler's hands the power to order

mobilization or declare war in advance of deliberate consultation with a representative assembly, and of coöperative action thereby. The fact that German mobilization was ordered three days in advance of the meeting of the Reichstag confounds all American ideas and practices about the rights of the people and the proper limits of Executive authority.

(c) The secrecy of European diplomatic intercourse and of international understandings and terms of alliance in Europe is in the view of ordinary Americans not only inexpedient, but dangerous and unjustifiable. Under the Constitution of the United States no treaty negotiated by the President and his Cabinet is valid until it has been publicly discussed and ratified by the Senate. During this discussion the people can make their voice heard through the press, the telegraph, and the telephone.

(d) The reliance on military force as the foundation of true national greatness seems to thinking Americans erroneous, and in the long run degrading to a Christian nation. They conceive that the United States may fairly be called a great nation; but that its greatness is due to intellectual and moral forces acting through adequate material forces and expressed in education, public health, and order, agriculture, manufacturing, and commerce, and the resulting general well-being of the people. It has never in all its history organized what could be called a standing or a conscripted army; and, until twenty years ago, its navy was very small, considering the length of its seacoasts. There is nothing in the history of the American people to make them believe that the true greatness of nations depends on military power.

OBJECT TO EXTENSION BY FORCE

(e) They object to the extension of national territory by force, contrary to the wishes of the population concerned. This objection is the inevitable result of democratic institutions; and the American people have been faithful to this democratic opinion under circumstances of considerable difficulty—as, for example, in withdrawing from Cuba, the rich island which had been occupied by American troops during the short war with Spain (1898) and in the refusing to intervene by force in Mexico for the protection of American investors, when that contiguous country was distracted by factional fighting. This objection applies to long-past acts of the German Government, as well as to its proceedings in the present war—as, for example, to the taking of Schleswig-Holstein and Alsace-Lorraine, as well as to the projected occupation of Belgium.

(f) Americans object strenuously to the violation of treaties between nations on the allegation of military necessity or for any other reason whatever. They believe that the progress of civilization will depend in

future on the general acceptance of the sanctity of contracts or solemn agreements between nations and on the development by common consent of international law. The neutralization treaties, the arbitration treaties, The Hague Conferences, and some of the serious attempts at mediation, although none of them go far enough, and many of them have been rudely violated on occasion, illustrate a strong tendency in the civilized parts of the world to prevent international wars by means of agreements deliberately made in time of peace. The United States has proposed and made more of these agreements than any other power, has adhered to them, and profited by them. Under one such agreement, made nearly a hundred years ago, Canada and the United States have avoided forts and armaments against each other, although they have had serious differences of opinion and clashes of interests, and the frontier is 3,000 miles long and for the most part without natural barriers. Cherishing the hope that the peace of Europe and the rights of its peoples may be secured through solemn compacts (which should include the establishment of a permanent international judicial tribunal, supported by an international force), Americans see, in the treatment by the German Government of the Belgium neutralization treaty as nothing but a piece of paper which might be torn up on the ground of military necessity, evidence of the adoption by Germany of a retrograde policy of the most alarming sort. That single act on the part of Germany—the violation of the neutral territory of Belgium—would have determined American opinion in favor of the Allies, if it had stood alone by itself—the reason being that American hopes for the peace and order of the world are based on the sanctity of treaties.

OUR DIFFERENT IDEALS

(g) American public opinion, however, has been greatly shocked in other ways by the German conduct of the war. The American common people see no justification for the dropping of bombs, to which no specific aim can be given, into cities and towns chiefly inhabited by non-combatants, the burning or blowing up of large portions of unfortified towns and cities, the destruction of precious monuments and treasures of art, the strewing of floating mines through the North Sea, the exacting of ransoms from cities and towns under threat of destroying them, and the holding of unarmed citizens as hostages for the peaceable behavior of a large population under threat of summary execution of the hostages in case of any disorder. All these seem to Americans unnecessary, inexpedient, and unjustifiable methods of warfare, sure to breed hatred and contempt toward the nation that uses them, and therefore to make it difficult for future generations to maintain peace and order in Europe. They cannot

help imagining the losses civilization would suffer if the Russians should ever carry into Western Europe the kind of war which the Germans are now waging in Belgium and France. They have supposed that war was to be waged in this century only against public, armed forces and their supplies and shelters.

These opinions and prepossessions on the part of the American people have obviously grown out of the ideals which the early English colonists carried with them to the American wilderness in the seventeenth century, out of the long fighting and public discussion which preceded the adoption of the Constitution of the United States in the eighteenth century, and out of the peculiar experiences of the free commonwealths which make up the United States, as they have spread across the almost uninhabited continent during the past 125 years.

The experience and the situation of modern Germany have been utterly different. Germany was divided for centuries into discordant parts, had ambitious and martial neighbors, and often felt the weight of their attacks. Out of war came accessions of territory for Prussia, and at last German unity. The reliance of intelligent and patriotic Germany on military force as the basis of national greatness is a natural result of its experiences. Americans, however, believe that this reliance is unsound both theoretically and practically. The wars in Europe since 1870-71, the many threatenings of war, and the present catastrophe seem to Americans to demonstrate that no amount of military preparedness on the part of the nations of Europe can possibly keep the peace of the Continent, or indeed prevent frequent explosions of destructive warfare. They think, too, that preparation for war on the part of Germany better than any of her neighbors can make will not keep her at peace or protect her from invasion, even if this better preparation include advantages of detail which have been successfully kept secret. All the nations which surround Germany are capable of developing a strong fighting spirit; and all the countries of Europe, except England and Russia, possess the means of quickly assembling and getting into action great bodies of men. In other words, all the European States are capable of developing a passionate patriotism, and all possess the railroads, roads, conveyances, telegraphs, and telephones which make rapid mobilization possible. No perfection of military forces, and no amount of previous study of feasible campaigns against neighbors, can give peaceful security to Germany in the present condition of the great European States. In the actual development of weapons and munitions, and of the art of quick intrenching, the attacking force in battle on land is at a great disadvantage in comparison with the force on the defensive. That means indecisive battles and ultimately an indecisive war, unless each party is resolved to push the war to the

utter exhaustion and humiliation of the other—a long process which involves incalculable losses and wastes, and endless miseries. Americans have always before them the memory of their four years' civil war, which, although resolutely prosecuted on both sides, could not be brought to a close until the resources of the Southern States in men and material were exhausted. In that dreadful process the whole capital of the Southern States was wiped out.

BUT ONE POSSIBLE ISSUE

Now that the sudden attack on Paris has failed, and adequate time has been secured to summon the slower-moving forces of Russia and England, and these two resolute and persistent peoples have decided to use all their spiritual and material forces in coöperation with France against Germany, thoughtful Americans can see but one possible issue of the struggle, whether it be long or short, namely, the defeat of Germany and Austria-Hungary in their present undertakings, and the abandonment by both peoples of the doctrine that their salvation depends on militarism and the maintenance of autocratic executives intrusted with the power and the means to make sudden war. They believe that no human being should ever be trusted with such power. The alternative is, of course, genuine constitutional government, with the military power subject to the civil power.

The American people grieve over the fruitless sacrifices of life, property, and the natural human joys which the German people are making to a wrong and impossible ideal of national power and welfare. The sacrifices which Germany is imposing on the Allies are fearfully heavy, but there is reason to hope that these will not be fruitless, for out of them may come great gains for liberty and peace in Europe.

All experienced readers on this side of the Atlantic are well aware that nine-tenths of all the reports they get about the war come from English and French sources, and this knowledge makes them careful not to form judgments about details until the events and deeds tell their own story. They cannot even tell to which side victory inclines in a long, far-extended battle until recognizable changes in the positions of the combatants show what the successes or failures must have been. The English and French win some advantage so far as the formation of public opinion in this country is concerned, because those two Governments send hither official reports on current events more frequently than the German Government does, and with more corroborative details. The amount of secrecy with which the campaign is surrounded on both sides is, however, a new and unwelcome experience for both the English and the American public.

The pamphlets by German publicists and men of letters which are now coming to this country, and the various similar publications written here, seem to indicate that the German public is still kept by its Government in ignorance about the real antecedents of the war and about many of the incidents and aspects of the portentous combat. These documents seem to Americans to contain a large amount of misinformation about the attack of Austria-Hungary on Servia, the diplomatic negotiations and the correspondence between the sovereigns which immediately preceded the war, and the state of mind of the Belgian and English peoples, American believers in the good sense and good feeling of the common people naturally imagine, when an awful calamity befalls a nation, that the people cannot have been warned of its approach, else they would have avoided it. In this case they fear that the Emperor, the Chancellery, and the General Staff have themselves been misinformed in important respects, have made serious miscalculations which they are proposing to conceal as long as possible, and are not taking the common people into their confidence. American sympathies are with the German people in their sufferings and losses, but not with their rulers, or with the military class, or with the professors and men of letters who have been teaching for more than a generation that Might makes Right.

Dread of the Muscovite does not seem to Americans a reasonable explanation of the present actions of Germany and Austria-Hungary, except so far as irrational panic can be said to be an explanation. Against possible, though not probable, Russian aggression, a firm defensive alliance of all Western Europe would be a much better protection than the single Might of Germany. It were easy to image also two new "buffer" States—a reconstructed Poland and a Balkan Confederation. As to French "revenge," it is the inevitable and praiseworthy consequence of Germany's treatment of France in 1870-71. The great success of Germany in expanding her commerce during the past thirty years makes it hard for Americans to understand the hot indignation of the Germans against the British because of whatever ineffective opposition Great Britain may have offered to that expansion. No amount of commercial selfishness on the part of insular England can justify Germany in attempting to seize supreme power in Europe and thence, perhaps, in the world.

Finally, Americans hope and expect that there will be no such fatal issue of the present struggle as the destruction or ruin of the German Nation. On the contrary, they believe that Germany will be freer, happier, and greater than ever, when once she has got rid of the monstrous Bismarck policies and the Emperor's archaic conception of his function, and has enjoyed twenty years of real peace.

CHARLES W. ELIOT.

"FITZGERALDISM"—"REFLEX ANAESTHESIA"—WHAT IS IT?

BY WM. HARPER DEFORD, D. D. S., M. D., DES MOINES, IOWA

This magazine has done much to call Dr. FitzGerald's method to the attention of the profession, and so republishes this article in the *New Jersey Dental Journal* by one of the leading anesthetists of this country.

The DIGEST has no side to favor or opinion to express. It is strictly neutral. It acts only as a clearing house for such communications as seem worth while.—EDITOR.

Dr. FitzGerald and four "zonatherapists" appeared on the programme of the New Jersey State Dental Society, July 15-18, and the writer happened to be present at this meeting and was a close observer of all that was said and much of what was done.

On Thursday night, July 16th, Dr. FitzGerald delivered his lecture entitled "Reflex Anaesthesia" before a large audience in the ballroom of the Coleman House, using a hundred slides, and there was certainly not a dull moment during his entire discourse.

Not only did the doctor show us where to press to obtain surgical anaesthesia in every part of the body, but threw upon the screen the pictures of patients who had been relieved of tumefactions of various kinds, pain extending over a period of months, goiters and tubercular enlargements, neoplasms, sarcomas, and so-called carcinomas that had defied medical treatment disappeared because of pressure exerted or applied in the proper zone.

For the sake of convenience the body has been divided into five zones by Dr. FitzGerald, these zones running vertically up and down the body.

The thumb of the hand and the large toe of the foot on the right side of the body are in the same zone, consequently by pressing the joint of the large toe you get anaesthesia in the central, lateral and cuspid of the right side, just as you would if you manipulated the joint of the right thumb. To get anaesthesia in the bicuspid, you seize the second joint of the index finger with your thumb and finger, press the joint distally for about a minute, then another minute or two on the dorsal and plantar aspects pressing as hard as possible, just short of actual pain.

The first and second molar teeth are controlled by pressing likewise on the second phalanx of the second finger, while the third molar and the surrounding tissues may be anaesthetized by like pressure exerted on the second joint of the third finger or third toe, whichever is the most convenient. Do not for a moment think that the little finger has been overlooked. Pressure on the second joint of the little finger, we were told, produced anesthesia in the region back of the ear, and that mastoid operations had been performed by this method without the aid of any

other anaesthetic. In a private conversation, Dr. FitzGerald explained to the writer that by interlocking the fingers of the two hands, holding them in front of the body, pressing hard toward each other, pressing laterally on all the joints at the same time, complete anaesthesia of all the teeth could be obtained at once. By placing the fingers and thumbs of the two hands end to end, pressure for three minutes would produce relaxation of all the muscles and tissues of the body, consequently anaesthesia. In this connection one of the clinicians made the remark that by having a patient place both hands in front of the knee, interlocking the fingers and thumbs, pressing hard all the joints, he had extracted eight teeth without the slightest pain to the patient.

At the close of the lecture, four gentlemen from Hartford, protégés of Dr. FitzGerald, who were on the programme for clinical demonstration, added much to the interest of the occasion by describing cases in practice, and promising to reproduce their successes on the following day clinically.

Fifteen men were admitted at a time to the clinics and allowed to remain fifteen minutes. Three "zonatherapists" conducted the clinic, each having a separate booth. In the booth which the writer visited the first time around a dentist took the chair having a sensitive bucco-distal cavity in a lower first molar. The operator did not rely upon the finger joint in this case, but made pressure with his thumb and finger on the tissues at the extremity of the roots, buccally and lingually, pressure causing intense pain. At the expiration of three minutes the cavity was touched with an explorer and patient could not distinguish any diminution in sensation.

Second Case—Dentist presented with a mild acute tympanitis, resulting from water entering the ear while bathing. Attempt was made to apply pressure at the inferior dental foramen. Much gagging resulted, and intense pain during the entire three minutes, with no diminution of the symptoms.

In the third case an attempt was made to anaesthetize the tissues adjacent to the upper left central incisor. The thumb was applied to the hard palate distally, and the index finger to the tissues above the tooth labially, pressure being exerted for three minutes. A sterilized needle applied to the gum showed not the slightest numbness. The clinician remarked that he had been more successful in inducing anaesthesia for extracting than for such cases.

On the second time around the writer took the chair of another clinician and wished the gum anaesthetized in the region of the upper right cuspid. The pressure applied with thumb and finger on the tissues above the tooth was so painful it felt as though the bone would be crushed, and it was necessary to diminish the pressure. At the expiration of the allotted

time, three minutes, the needle test showed no diminution of sensation in the gum.

On the second day the interest had diminished to such an extent that it was not difficult to find a good position at any of the chairs. A lower molar was fractured for a dentist in an attempt to remove it under pressure anaesthesia, and after several unsuccessful attempts at removal, with apparently as much suffering as I have ever seen in a dental chair, nitrous oxid and oxygen was administered and the roots extracted.

I, of course, could not see all the cases, but did see a sufficient number to convince me that only occasionally could operations be performed painlessly by the FitzGerald method.

The most successful case that came under my observation was the extraction of a very loose root from the mouth of a patient some seventy-five to eighty years of age, the amount of force exerted must have been less than one pound. The audience, in a spirit of fun, applauded, producing considerable merriment.

The same operator made pressure for three minutes with the thumb and finger over the roots of a lower second molar and at the expiration of the proper time, passed a pin deeply into the festoon of the gum about the tooth without pain, the patient saying that he did not perceive pain. In talking with others who witnessed these clinics, no one seemed to have witnessed any more successful cases than I have just reported.

In private conversation with the clinician, whom I knew to be an extracting specialist, I asked what success he had with this method in practice. He replied, "In about twenty-five per cent. of the cases," but he added, "I never use this method unless the patient requests it, and then I do the best I can, not promising anything." He also made the statement: "You can get analgesia, however, sufficient to operate on the most sensitive cavities in 95 per cent. of the cases in which it is used." In reply to the question if he relied upon pressure on the finger joints he said: "No, I prefer to get as direct pressure as possible upon the nerves themselves approaching the teeth and gums."

Dr. FitzGerald was present at these clinics, but at no time did I see him make practical application of his methods. He is certainly a very affable gentleman, and explained constantly to groups of dentists the things they wished to know, giving them personal instruction as to where and how to make pressure to get results in various parts of the body.

The clinical demonstrations observed by the writer were disappointing. They should have been more successful, but one is never as successful in any kind of an anaesthetic clinic given publicly as in private, and all of those presenting for tests that I witnessed were dentists with one exception, and these men, with minds alert, doubting that the attempt

would be successful, studying closely the sensations produced, mitigated against success. In all the cases I saw, direct pressure with the fingers in the mouth was used—no attention being given to pressure on the finger joints.

To make my position clearer I will quote the following from R. Kendrick Smith, D. O., of Boston, from an article already referred to as written by him, describing a clinical case witnessed at the meeting of the Connecticut State Dental Society. He writes: "The most spectacular event on the programme was the extraction of three molars, none of which was loose, with no anaesthesia or preparation of any sort, except pressure. I stood beside the dental chair and watched this patient closely, searching for the quiver of an eyelid or one single reflex movement of any part of the body which would indicate pain. Nothing of this sort occurred. Instead the patient calmly asked the dentist if the teeth were out. I stood behind the operator when this anaesthetic was administered. It was accompanied by pressure with a blunt piece of metal upon the inferior dental nerve at the foramen on the inner aspect of the inferior maxilla with counter pressure with the finger on the gum at the root of the tooth on the external aspect of the jaw. This pressure is kept up from one to three minutes, according to the severity of the operation. The instrument is not necessary, as the pressure can be made entirely with the thumb and finger. The pressure on the foramen may be omitted, and the same result secured by squeezing the gum and the root of the tooth with one finger inside and the other outside. Pain is impossible if this has been properly done."

It is evident then, if the writer just quoted states Dr. FitzGerald's proposition correctly, that the demonstration I saw at the New Jersey meeting failed because of improper technic, and that if the proper amount of pressure had been exerted, in exactly the right place, for exactly the right amount of time, "pain would have been impossible." There is nothing very difficult or startling about this. If you inhibit a nerve, or press upon it to such an extent that brain communication is cut off, pain sensations are as surely obstructed as a telegraphic message is obstructed when the wire is cut that transmits the message. Painless extractions of teeth have been made as the result of hypodermic injection of distilled water and normal salt solution. No one claims any anaesthetic properties for water or salt, but both when injected exert considerable pressure upon the adjacent nerves and the tissues become blanched. Since 1880, every now and then I have met some practitioner who has related cases of painless tooth extraction by the exertion of pressure, and we have a dentist in Des Moines who has practised this method for thirty years with varying success, indeed occasionally getting

a perfect result. But this is not a method that can be relied upon, or can you promise anything in a given case, and believe me, the application of pressure à la the FitzGerald protégés, and the after results are anything but pleasant. The pain necessary to get results is so great, and the nauseating sensation of going back with the finger far enough to make direct pressure on the inferior dental foramen so unbearable, that few will permit it. All the men who served as patients at the Ocean Grove meeting, with whom I talked two days after the pressure was applied, complained of pain still present in the parts, and as I pen this, three weeks after the meeting, I still have a degree of inflammation and discomfort in the tissues that were pressed in my mouth in an attempt to produce anaesthesia. Such manipulation by osteopaths in different parts of the body to relieve pain is a daily occurrence, but before the osteopath was, it had been practised for centuries. You have frequently seen baseball players grasp and squeeze hard their finger upon being hit on the end of the finger with a swift ball—the pressure inhibits nerve action, shuts off communication with the brain, diminishes or prevents pain.

But the real mysticism of the FitzGerald method of pressure, or "reflex anesthesia," is found in those cases in which the pressure is made at points and positions so remote from the seat of pain or pathologic condition, as to evidently have no connection whatsoever with the case under consideration. Dr. FitzGerald told the writer that he had no explanation to offer, and that should he advance a theory to-day, he might have to announce another next week, but he did say we know very little about the lymph, and it may be that we get this action through the lymph channels.

He maintains that the pressure must be applied over some bony prominence. It must be applied within the same zone as the condition to be relieved. That pressure anywhere within the zone over a bony prominence will do. He personally grasped the hand of the writer and located the prominences to be pressed to obtain results in and about the various teeth, and said the corresponding prominences on the toes would prove as efficacious. He maintains that after exerting the proper amount of pressure for the proper length of time the patient will feel a wave-like sensation passing from the part pressed to the organ or tissues desired, and when this sensation arrives at the given part, pain, if present, is abolished, and a state of surgical anaesthesia induced. Accordingly, if a patient presents with a case of acute pericementitis involving the superior first bicuspid tooth on the right side, you have only to grasp the second joint of the index finger on the right side, make lateral pressure for a minute or two, then make plantar and dorsal pressure on the same knuckle for a like period of time, and this wave should be felt ascending

the arm and locating itself in and about the tooth, and anaesthesia should develop and the pain entirely disappear. Try it.

If you have in your own mouth a case of pulpitis in an upper left lateral incisor, grasp the joint of the thumb on the left hand, make the pressure as just described, and in a little while a wave of anaesthesia should ascend the arm and reach the pulp of your tooth and the pain fade away.

The next time you have occasion to extract a third molar tooth make pressure as described on the second phalanx of the third finger, and when the "wave" reaches the tooth, or in its absence you believe it the proper time to extract, extract, and note the result.

I doubt not that Dr. FitzGerald and others can do this very thing, because he related and described many cases in his lecture of various pathologic conditions, grave in their nature, that were relieved of pain and made comfortable by pressure much more remote than the hypothetical cases just cited by me. These things are not beyond belief. They were accomplished fifty years ago in France by Bernheim and Charcot, and put into daily practice now by Monroe, of Omaha, and others all over the world. The writer has on numerous occasions extracted teeth painlessly by placing an anaesthetic inhaler without a trace of anaesthetic, over the mouth and nose for a space of two or three minutes. The most sensitive of cavities have many times been prepared painlessly by the same method.

"A lady saw a heavy dish fall on her child's hand, cutting off three fingers. She felt pain in her hand, and on examination the corresponding three fingers were swollen and inflamed. In twenty-four hours incisions were made, and pus evacuated." (Schofield, *The Unconscious Mind*, p. 257).

"A hypnotised subject can hold out his arm indefinitely in painless contraction, can inhale strong ammonia under the name of attar of roses with unwatered eyes." (W. James, *Physiology*, vol. ii., p. 602.)

"There seems no reasonable ground for doubting that, in certain chosen subjects, congestions, burns, blisters, raised papules, bleeding from the nose or skin, can be produced by suggestion." (Braid, *Power of Mind Over Body*.)

"The effects of a purgative pill have been rendered nil and it has produced sleep in the belief that it was an opiate pill, though consisting of a strong dose of colyenth and calomel. On the other hand, an opium pill given for sleep has failed to produce it, but proved a strong purgative in the belief that it was so intended." (Schofield, *The Unconscious Mind*, p. 250.)

The grasping of the hands, interlocking the fingers and pressing

tightly on the joints as suggested by Dr. FitzGerald, is one of the commonest of attitudes or poses insisted upon by the professional hypnotist. A patient sitting in a dental chair, for the purpose of tooth extraction, believing that the pressure on the finger joint was for the purpose of relieving pain, and thinking constantly "there will be no pain, this will keep it from hurting," partakes not only of the direct suggestion applied by the operator, but in addition is aiding his own condition by auto-suggestion. If there was not some other influence at work than the mere pressure on the part, then every case in which pressure was applied would be, must be, successful. If there were not some other influence at work, then one man could get as good results as another—we could demonstrate this to our satisfaction in our own offices, every one of us, if it depended upon pressure alone.

Since the Connecticut State meeting one of the clinicians claims to be able to anaesthetize one-half of his body. Yes, and when he becomes more proficient in auto-suggestion he will find he can just as easily anaesthetize the other half.

On the boat from New York to Norfolk, at the close of the New Jersey meeting, we met Dr. C. W. Bruner, of Waterloo, Ia., who had never heard of Dr. FitzGerald or his method of producing anaesthesia. In the presence of E. I. McKesson, M. D., of Toledo, Ohio, he related the following case in practice: "Some fifteen years ago, a little barefooted boy, eight years of age, was brought to his office for the purpose of having several teeth extracted. The little fellow persisted in placing his hands over his mouth and grabbing the hand of the operator, thus defeating the operation. Dr. Bruner said to him, 'you just take hold of your big toe, and the harder I push the harder you squeeze, and it will not hurt you one bit to have these teeth out.' The little fellow followed directions, and did not shed a tear or show any evidences of pain or suffering."

The *Sunday Magazine*, containing the article of Dr. Bowers, has some five millions of readers. The *Literary Digest*, with a large subscription list, reaches probably the most intelligent and intellectual audience of readers in our country, and the message is carried to these readers that dental operations can now be performed painlessly by a very simple method. Other publications will take this matter up, and it will go around the world, it cannot now be stopped. Already the public are demanding it of the dental profession—inquiring what it means. What the *Literary Digest* prints, unfortunately, cannot be lightly explained away, and when we are appealed to by the public and try to dismiss them with "there is nothing in this," they will not be satisfied. They will rather cling to the *Literary Digest* and say, "this man is not up to the last minute in dentistry, he is not keeping up with the procession, he

is not modern, he cannot do my dentistry." The burden of proof is upon us.

We know there is one sure method of producing analgesia and anaesthesia—it can be done with nitrous oxid and with somnoform. If we cannot meet this demand by applying the FitzGerald method, then we must adopt some method, and those of us who have not done so, must as quickly as possible become proficient in inducing analgesia and anaesthesia by the use of nitrous oxid or somnoform. Then if patients insist on having their hands held, and their joints manipulated, they can do this for themselves, and it will not detract in the least from the effects of nitrous oxid or somnoform.—*The New Jersey Dental Journal*.

THE PRESIDENT'S CALL FOR PRAYER

I believe in praying. I am glad that President Wilson has chosen a special day to consider the cause of peace; but in order that Europe may not look upon us as a nation of hypocrites, I believe the following deserves careful consideration.

An American shipper the other day asked a German friend how long he thought the war would last.

"As long as you continue to feed the English. The war is in your hands. You can bring it to an end whenever you desire. Until you are willing to make some sacrifices to bring it to an end, I suggest that you avoid talking peace."

During a similar conversation between a manufacturer and a British banker, the American asked why the English government paid so little attention to President Wilson's offer of mediation. The Englishman replied:

"Because we felt that this was simply a personal request of the President, and that it did not represent the desire of the American people as a whole. When your country as a nation desires to stop the war, it will have no difficulty; all it needs to do is to refuse to buy any securities, goods, ships, dyestuffs, or anything else of Germany and the belligerents. The trouble with you Americans is that you *like* to talk peace and suggest that others make sacrifices, but are unwilling to make sacrifices yourselves, even to stop such a terrible conflict as rages to-day."

It seems to me that here is a thought worthy of the deepest consideration for all who pretend to stand for righteousness, democracy, and common humanity. Every one of us, whether representing capital or labor, manufacturers or consumers, can perform a definite part in quickly bringing these hostilities to an end if we are willing to make a little sacri-

fice. On the other hand, by working along the lines of least resistance, and following our present paths, we are definitely working to continue these hostilities. The following illustrations, taken at random, suggest what I have in mind:

Labor organizations are passing resolutions condemning governments, secret diplomacy, and militarism, but they are doing nothing definite to bring hostilities to an end. Before passing resolutions on the horrors of war, working men should refuse to use any raw materials imported from the belligerents, or manufacture certain goods exported to the belligerents. Some selfish manufacturers might strenuously object to such a procedure on the part of organized labor, but they would be so condemned by public sentiment that their opposition would be of no avail.

Moreover, to offset such a boycott on foreign goods, our own raw materials and manufactures could be labeled "Made in United States," and a great boom in American products could be inaugurated. If the working people and consumers generally were determined not to use or buy foreign products they would automatically develop a campaign in favor of home products. One industry must be the reciprocal of the other. *Personally*, I feel that such a boycott of foreign goods by our manufacturers and working people, merchants and consumers, would bring the greatest possible impetus to the development of worth-while American industries, and in addition bring the war to an end.—*Selected.*

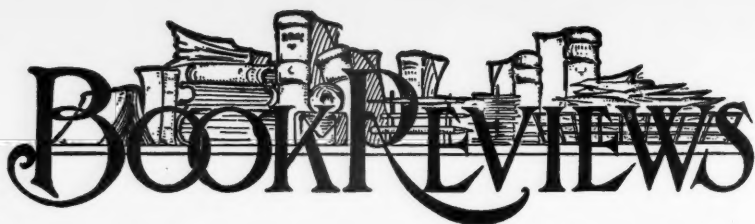
MEMORIAL SERVICE

DR. GEORGE WOOD CLAPP,
220 West 42nd Street,
New York City.

The dental profession of Indiana will have a memorial service in honor of the memory of Doctor George Edwin Hunt, to be held in the Auditorium of the Masonic Temple, North and Illinois Streets, Indianapolis, Indiana, on the evening of November 21, 1914, at eight o'clock. The principal address will be by Doctor John N. Hurty.

The friends of Doctor Hunt are cordially invited to attend.

CARL D. LUCAS,
Chairman of Committee.



BOOK REVIEWS

TOOTH — USE ABUSE AND EXPENSE. By WM. MUCHOW, D. D. S.,
EVANSTON, ILL.

We have received from Dr. W. Muchow of Evanston, Ill., a little booklet on this subject which is worthy of rather extended attention. The information is given in the form of questions and answers. The questions include many that are familiar and the answers are usually good.

Dr. Muchow has chosen a good cover stock and good inside stock for his book and has gone to the trouble to print an excellent colored diagram of the several parts of a natural tooth. The cover design is open to some criticism and the press work shows evidence of carelessness.

The book fails to make the favorable impression of which it is capable, partly because the grammar is bad in places and this might offend the taste of intelligent patients.

The general plan is excellent and if the execution had been equal to the conception, it would have been a very valuable booklet.

LOCAL ANESTHESIA IN DENTISTRY. WITH SPECIAL REFERENCE TO THE
MUCOUS AND CONDUCTIVE METHODS. A Guide for Dentists, Surgeons
and Students. By Professor DR. GUIDO FISCHER, Director of the
Royal Dental Institute of the University of Marburg. Translated by
DR. RICEHARD H. RIETHMÜLLER, of the Dental Department of the
Medico-Chirurgical College, Philadelphia. Large octavo, 244 pages,
with 115 engravings (mostly colored) and 2 plates. Cloth, \$4.00 net.
Lea & Febiger, Publishers, Philadelphia and New York, 1914.

This volume is the second American, translated from the third German edition. There has been no pains spared in the revision of this very valuable work, and all improvements and changes that have been made are apparently based upon the most reliable authorities and the best and most practical procedures. The German text has been liberally translated and some additions have been made which are of very practical value.

The technique of making soft solutions has been greatly simplified and the mode and points for injection are fully illustrated. General and local anesthesia have received due consideration but special attention has been given to asepsis and conductive anesthesia; this latter method is said to be preferred by many skillful operators.

Of the different agents for inducing local anesthesia the choice of Dr. Fisher seems to be novocain-suprarenin. He quotes from Braun as follows:—

"The effect of suprarenin far from being impaired by novocain, seems to be enhanced by this drug, as my very first tests have shown and numerous subsequent investigations have corroborated. The anemia which follows novocain-suprarenin injection is much more pronounced than when a pure suprarenin solution or a cocain solution containing an equal amount of suprarenin is employed."

Many additions have been made both in text and in illustrations. The latter are of a very excellent nature. The colored illustrations are of exceeding value in following the technique, in fact the book is a reliable guide in local anesthesia. The publishers certainly have spared no expense in bringing out this beautiful volume.

There is an excellent index.

SOCIETY NOTES

CONNECTICUT.

The Connecticut State Dental Commission will meet at Hartford, November 19-21, 1914, to examine applicants for license to practise dentistry in Connecticut.—EDWARD EBERLE, 902 Main St., Hartford, *Recorder*.

ILLINOIS.

The next meeting of the Illinois State Board of Dental Examiners, for examination of applicants for license to practise Dentistry, will be held at the Chicago College of Dental Surgery, Chicago, Illinois, November 9th, 1914.—O. H. SEIFERT, Springfield, Illinois, *Secretary*.

INDIANA.

The next meeting of the Indiana State Board of Dental Examiners will be held in the State House, Indianapolis, November 16-20, 1914.—FRED J. PROW, *Secretary*. The Second Annual Meeting of the First District Dental Society will be held in Evansville, Ind., November 4-5, 1914. J. W. ROPER, Evansville, *Secretary and Treasurer*.

IOWA.

The next meeting of the Iowa State Board of Dental Examiners for the examination of candidates will be held at Iowa City, Iowa, commencing Monday, November 30th.—J. A. WEST, 417 Utica Bld'g., Des Moines, Iowa, *Secretary*.

MICHIGAN.

The semi-annual meeting of the Michigan State Board of Dental Examiners will be held in the Dental College at Ann Arbor, November 14th, 1914.—F. E. SHARP, Port Huron, Michigan, *Secretary*.

MONTANA.

The Montana State Board of Dental Examiners, will meet in Session on the Second Monday in January, 1915.—G. A. CHEVIGNY, Butte, Montana, *Secretary*.

NEW YORK.

The Fifth, Sixth, Seventh, and Eighth District Dental Societies, state of New York, will hold a Union Meeting at Hotel Iroquois, Buffalo, New York, November 19-21, 1914.—J. PORTER MALLOY, 463 West Ferry St., Buffalo, New York, *Chairman Local Committee*.

OHIO.

The Forty-ninth Annual Meeting of the Ohio State Dental Society will be held in Memorial Hall, Columbus, December 1st-3rd, 1914. Papers on live subjects by able men on Tuesday and Wednesday afternoon; clinics, Wednesday and Thursday forenoons.—F. R. CHAPMAN, 305 Schultz Building, Columbus, Ohio, *Secretary*.

TEXAS.

The next regular meeting of the Texas State Board of Dental Examiners will be held in Cathedral Hall, Galveston, Texas, beginning Monday morning Dec. 14th, at 9 o'clock. No interchange of licenses with other states.—C. M. McCAULEY, 434 Wilson Bld'g, Dallas, Texas, *Secretary*.

WISCONSIN.

The Wisconsin State Board of Dental Examiners will meet in Milwaukee at Marquette University, December 14, 1914, for examination of applicants to practise dentistry.—W. T. HARDY, 1404 Majestic Building, Milwaukee, Wis., *Secretary*.



OPENS AUG. 30TH, 1915

THE PANAMA PACIFIC DENTAL CONGRESS

The Committee of Organization of the Panama Pacific Dental Congress wishes it distinctly understood that the Panama Pacific International Exposition will not be postponed on account of the war, but will open on time, as will also the Panama Pacific Dental Congress. The authority for this statement is from President Moore of the Exposition Company.

At the present time matters relating to the Panama Pacific Dental Congress are most encouraging. The attendance so far as can be judged by those who attended the meeting of the National Dental Association at Rochester, and the meeting of the New Jersey State Dental Society, will break all previous records. Everyone said he was coming, and the Committee of Organization wishes to assure all prospective members that they will be well cared for in every way.

NEW JERSEY BOARD OF DENTAL EXAMINERS

The New Jersey State Board of Dental Examiners will hold their regular semi-annual meeting and examination in the Assembly Chamber of the State House, Trenton, N. J., on December 7, 8, 9, 1914. License fee \$25. No interchange of license. Applications must be filed *complete* with the Secretary at least ten days before date of examination.

All applicants for a license to practise dentistry in New Jersey "shall present to said Board a certificate from the Superintendent of public instruction showing that before entering a dental college, he or she had obtained an academic education consisting of a four years' course of study in an approved public or private high school or the equivalent thereof."

In accordance with the above ordinance the Secretary will issue application blanks to applicants only upon presentation of the required certificate from the Superintendent of public instruction, Trenton, N. J.

A bridge consisting of three or more teeth, exclusive of abutments, and one Richmond crown (gold metal), mounted and articulated, will be required, as a practical test in prosthetic dentistry, in place of a full set of teeth upon a metal plate as hitherto required. For further particulars, apply to, Alphonso Irwin, D. D. S., Secretary, 425 Cooper Street, Camden, N. J.

THOSE WISHING TO REGISTER IN INDIANA PLEASE NOTICE

In compliance with Section 9, an Act to regulate the practice of dentistry in the State of Indiana was approved March 8, 1913.

On or before the 31st day of December of each year each dentist now licensed or subsequently licensed to practise dentistry in this state shall transmit to the Secretary of the State Board of Dental Examiners his signature and address together with the fee of one dollar and the number of his or her registration certificate, and receive therefor a renewal license certificate. Said renewal license certificate shall be at all times properly displayed in the office of the one who is named in the license, and no person shall be deemed in legal practice who does not possess such renewal certificate. Any license granted by said board shall be cancelled and annulled if the holder thereof fails to secure the renewal certificate herein provided for within a period of three months after December 31st of each year; *provided* that any license thus cancelled may be restored by the board upon the payment of a fee of five dollars, if paid within one year after such cancellation.

Notices will be mailed to all dentists registered in Indiana to their last known address, on or before December 31st, 1914. Failure to receive such notice will not be an exemption or an excuse for non-payment. In such cases all persons should notify the Secretary, giving their correct address. This also applies to all those living outside the state.

Respectfully,

FRED J. PROW, Secretary,
Bloomington, Indiana.

MEETING OF THE NATIONAL ASSOCIATION OF DENTAL FACULTIES

The National Association of Dental Faculties will hold its meeting on the 26th and 27th of January at Ann Arbor, Michigan. Headquarters, The Allenel Hotel.

This meeting will precede the Teachers' Association meeting which will be held from the 28th to the 30th. Besides the regular business there will be several papers of interest to educators read before the Association.

The Executive Committee meets at nine o'clock Tuesday the 26th. Regular session will open at ten.

B. HOLLY SMITH, *Chairman of Executive Committee*,
Charles Channing Allen, *Secretary*.

FUTURE EVENTS

November 3-6, 1914.—Next Meeting of the Dental Manufacturers' Club, Drill Hall of Masonic Temple, Minneapolis, Minn.

November 4-5, 1914.—Second Annual Meeting of the First District Dental Society, Evansville, Ind.—J. W. ROPER, Evansville, *Secretary*.

November 9, 1914.—Illinois State Board of Dental Examiners, Chicago College of Dental Surgery.—O. H. SEIFERT, Springfield, Ill., *Secretary*.

- November 14, 1914.—Michigan State Board of Dental Examiners, Dental College, Ann Arbor, Mich.—F. E. SHARP, Port Huron, Mich., *Secretary*.
- November 16-20, 1914.—Indiana State Board of Dental Examiners, State House, Indianapolis.—FRED J. PROW, Bloomington, Ind., *Secretary*.
- November 19-21, 1914.—Connecticut State Dental Commission (Examining Board).—EDWARD EBERLE, Hartford, *Recorder*.
- November 19-21, 1914.—Union Meeting of Fifth, Sixth, Seventh and Eighth District Dental Societies of New York at Hotel Iroquois, Buffalo, New York.—J. PORTER MALLOV, 463 West Ferry St., Buffalo, *Chairman Local Committee*.
- November 30-Dec. 1, 1914.—Northwestern District of the Iowa State Dental Society, a Clinic and Manufacturers' Exhibit at the Martin Hotel, Sioux City, Iowa.—C. E. WESTWOOD, 500 F. L. and T. Building, Sioux City, Ia.
- December 1-3, 1914.—Ohio State Dental Society, Memorial Hall, Columbus, Ohio.—F. R. CHAPMAN, 305 Schultz Building, Columbus, O., *Secretary*.
- December 9-12, 1914.—Pennsylvania State Board of Dental Examiners, Philadelphia and Pittsburgh—ALEXANDER H. REYNOLDS, 4630 Chester Ave., Philadelphia, Pa., *Secretary*.
- December 14, 1914.—Wisconsin State Board of Dental Examiners, Marquette University, Milwaukee, Wis.—W. T. HARDY, 1404 Majestic Building, Milwaukee, *Secretary*.
- January 11, 1915.—Montana State Board of Dental Examiners—G. A. CHEVIGNY, Butte, Montana, *Secretary*.
- January 28-30, 1915.—American Institute Dental Teachers, Ann Arbor, Mich.—J. F. BIDDLE, Ann Arbor, Mich., *Secretary*.
- May 19-22, 1915.—Texas State Dental Association, Galveston, Texas.
- July 13-15, 1915.—Wisconsin State Dental Society, Oconomowoc, Wis.—O. G. KRAUSE, *Secretary*.
- August 30, 1915.—Federation Dentaire Internationale, San Francisco, Cal.—BURTON LEE THORPE, *Assistant Secretary*.
- August 30-Sept 1-9, 1915.—Panama-Pacific Dental Congress, San Francisco, Cal.—ARTHUR M. FLOOD, 240 Stockton St., San Francisco, Cal., *Secretary*.

PATENTS

- 1,087,978, Dental cabinet, R. B. Power, Green Bay, Wis.
- 1,088,962, Aseptic dental waste receiver, F. B. Bostwick, Plainfield, N. J.
- 1,089,201, Artificial tooth, A. E. Follows, Wavertree, London, England.
- 1,089,095, Cuspidor, H. E. Weber, Canton, Ohio.
- 1,091,789, Dental instrument, B. T. Andren, Milwaukee, Wis.
- 1,092,014, Tooth brush, T. L. Briggs, Brooklyn, N. Y.
- 1,091,852, Retaining means for sets of teeth, J. Lautenburg, New York, N. Y.
- 1,091,522, Moistening device for dental engine handpieces, D. W. McLean, Mount Vernon, N. Y.

DESIGNS

- 45,180, Tooth brush, H. Clapp, Boston, Mass.
- 45,198-9, Tooth brush, A. J. McDonagh, Toronto, Canada.

Copies of above patents may be secured for fifteen cents each, by addressing John A. Saul, Solicitor of Patents, Fendall Bld'g., Washington, D. C.